



Electronic
Components

MLCCBASE

Mlccbase Electronics Technology Co., Ltd



📍 4001 United Square, Shenzhen, 518033
🌐 <https://www.mlccbase.com>

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Timeline

1994

Founded as a family business in Shantou, Guangdong.

2001

Focused on the wholesale distribution of electronic parts and electronic communication equipment.

2010

A period of rapid growth, opened offices in Futian and Huaqiangbei, Shenzhen.

2013

Acquired 16 acres of land in Huizhou to build a factory, manufacturing passive components and semiconductors.

2015

Registered and opened its Hongkong office under the name Lianshenghong Technology Co., Ltd.

2019

Acquired qualifications for import and export, expanded the business to overseas market.

2022

Registered and opened its UK sales office in London.

About us

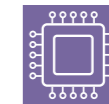


We manufacture...



Passive Components & Semiconductors

We distribute...



Integrated Circuits BoM Solution



30 Years of experience in electronic components industry



800 Employees
69% Production line | 10% R&D Department | 10% Management Team | 11% Quality Control Personnel



40000 m² Factory



2000 SKUs in 7 Categories



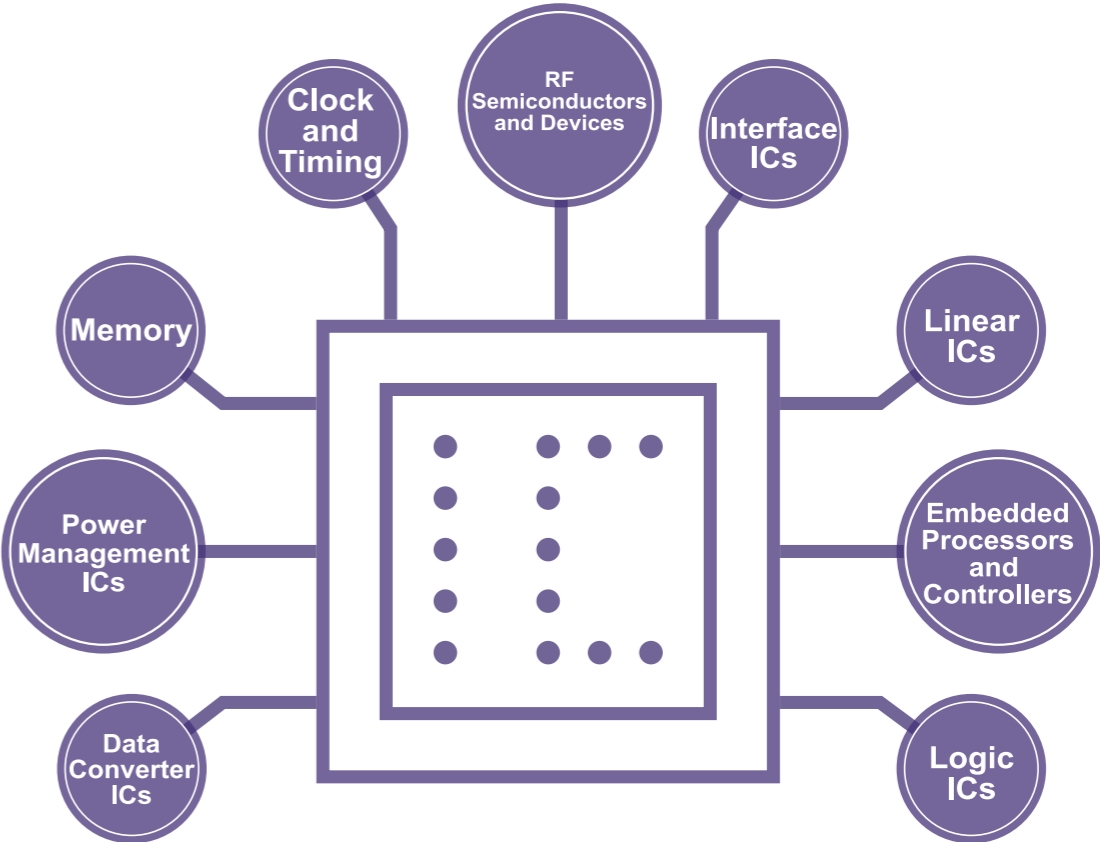
10 Billion items produced each year

As Distributor



United Square, Shenzhen

As a leading provider in the electronic component industry, we pride ourselves on our ability to deliver high-quality, efficient solutions for our clients. From off-the-shelf standard electronic products to hard-to-find parts, we cater to a wide variety of needs for both large and small businesses. With our extensive supply chain expertise and sourcing ability, we can keep your production lines operate without disruption.



We deliver:

Cable & Wire

- Audio/video Cables
- Ethernet Cables
- Fiber Optic Cables
- USB Cables

Optoelectronics

- Displays
- LEDs
- Optocouplers

Passive Components

- Capacitors
- Crystals and Oscillators
- Inductors
- Resistors
- Transformers

Electromechanical

- Relays
- Switches
- Thermal Management

Test Equipment

- Oscilloscopes
- Test Probes, Leads and Clips
- Thermometers

Connectors

- Audio/Video Connectors
- Automotive Connectors
- Board to Board Connectors
- IC and Component Sockets
- Memory Connectors
- Power Connectors

Power Products

- Batteries and Accessories
- Power Supply Modules
- Uninterruptible Power Supply (UPS)

Discrete Semiconductors

- Diodes
- Thyristors
- Transistors

Sensors

- Current Sensors
- Flow Sensors
- Motion Sensors
- Optical Sensors
- Pressure Sensors
- Temperature and Humidity Sensors

Broad Product Offerings



You build, we provide

Be your **turn key** solution for supply chain problems

Shortage

We recognize the necessity of preventing shortages and guarantee fast response capabilities for punctual deliveries. Our supply-chain proficiency allows us to promptly acquire electronic components worldwide, ensuring your production lines stay fully operational. Through our inventory-management program, we also mitigate shortage risks by devising procurement solutions in advance, fostering reliability and stability.

Obsolete & Hard to find

We'll be your connection to the industry's massive network of reliable open-market contacts to help you find the parts you need. With the help from our experienced purchasing team, we can reduce extended lead times by sourcing allocated, obsolete, end-of-life electronic components, and other hard-to-find parts from around the globe.

BOM Solution

Submit your bill of materials (BOM) request or discuss it with our team. A dedicated account manager will be assigned to handle your needs on a project-by-project basis, overseeing the entire procurement process to ensure your NPI proceeds without disruption.

Supplier Consolidation

We aim to serve as a one-stop solution for all your procurement needs, accepting shipments from various other suppliers. Our engineering professionals can organize and classify all necessary components for the need of your assembly, preparing a comprehensive package of parts and materials for delivery in a single shipment. We can also assist you with consolidating similar or overlapping suppliers, creating a plan to simplify your procurement process and enhance efficiency.



Your Customized Cost-saving Plan

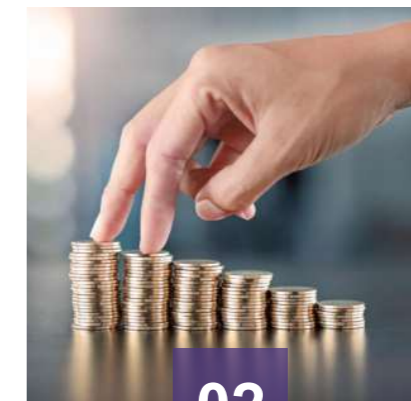
We understand your need of quality and reliability while keeping the cost within the budget. Our goal isn't to make a quick sale, but to build a relationship with each client that grows into a business partnership.



01

Vendor Managed Inventory

Our tailored VMI program enables you to concentrate on your core business operations while entrusting us with the essential tasks of inventory management and component sourcing. We offer project-based, long-term contracts to plan, monitor and replenish inventories to your specifications, leading to optimized supply chain processes, reduced costs, and boosted operational efficiency.



02

Cost Saving

Identify cost-savings opportunities with our PPV and cost reduction program. By using a sophisticated network of OEMs, EMS and independent distributors, we take advantage of regional, quantitative, or seasonal price variations, which assist our customers in reducing costs without sacrificing quality.



03

Excess Inventory Liquidation

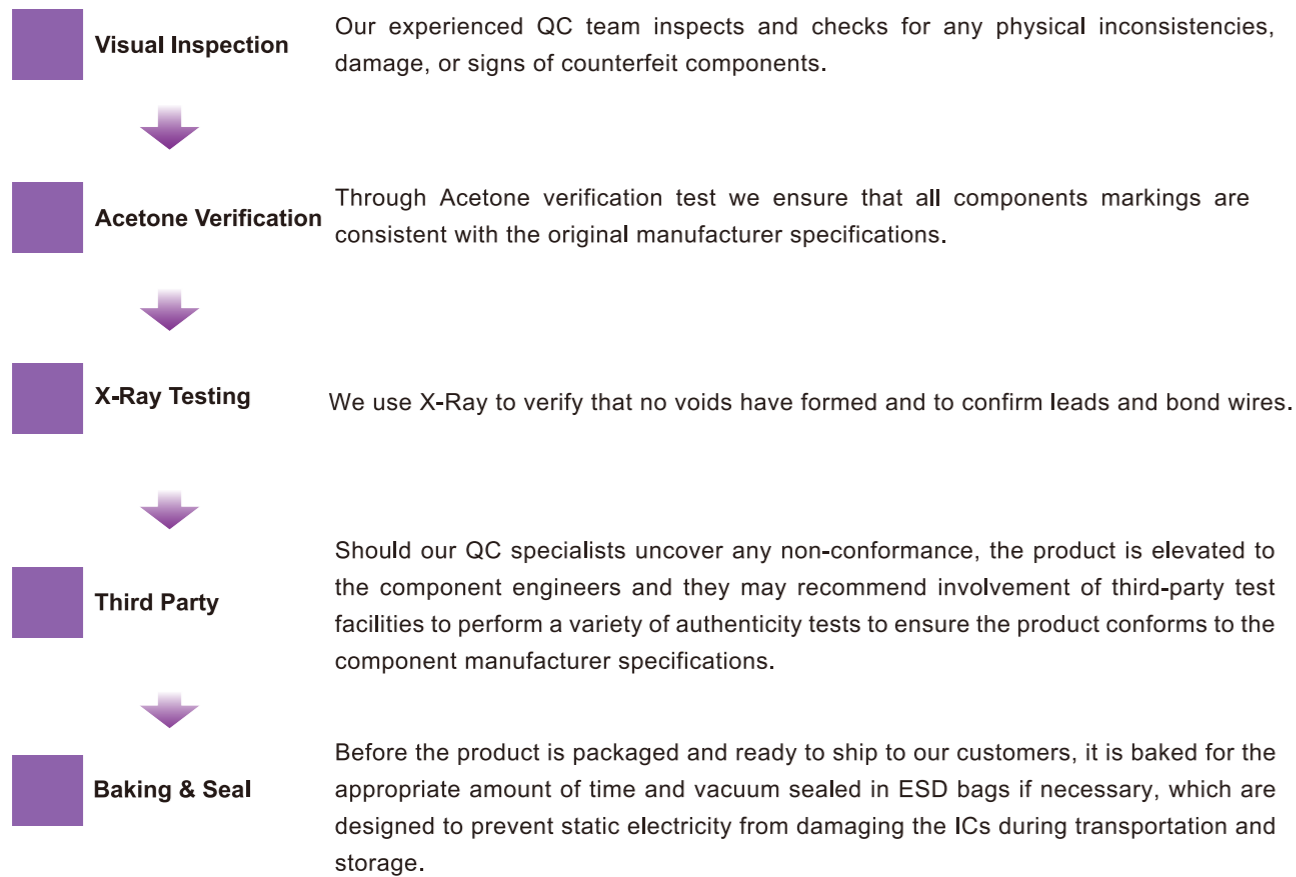
Turn your excess inventory into a revenue stream with our reverse logistic program. Delegate your concerns about excess, obsolete, end-of-life, and stagnant electronic component stock to us. We can assist you in acquiring the components you require while responsibly disposing of those you no longer need.

Quality Control

We inspect, measure, verify, and test electronic components to confirm that they meet the stringent standards. Our QC staff adheres to a standardized set of guidelines, guaranteeing a consistent level of quality across our services.

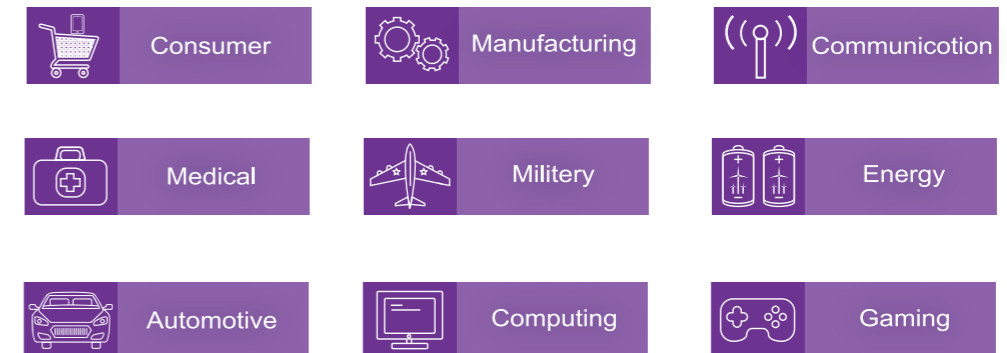


Our company is dedicated to supplying an extensive range of electronic components that cater to the diverse needs of various sectors, from consumer electronics to medical devices and military applications. Our knowledgeable team recognizes the unique industry standards and requirements for each sector, ensuring tailored solutions for your business. As a reliable supply chain partner, we excel in providing comprehensive BOM management that seamlessly integrate into your operations, boosting efficiency and reducing costs.



Remark: third party testing is available at any time upon customer request.

Industries we serve



Our Certifications

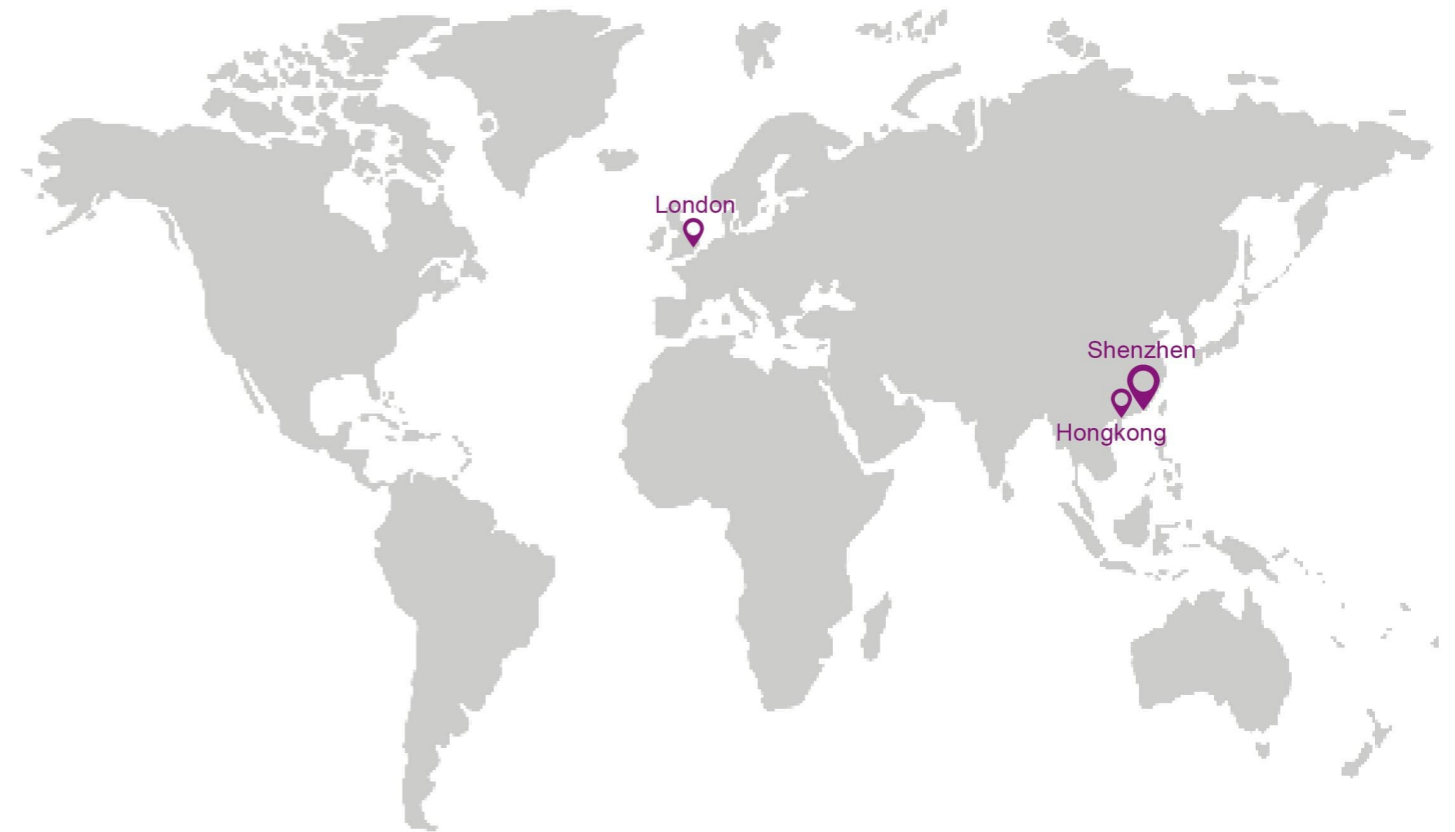


Seamless Distribution



Our goal is to provide clients with a One-Stop Solution tailored for you

Global Presence



Request a quote from our website <https://www.mlccbase.com> or email us.

Shenzhen Headquarter
 Mlccbase Electronics Technology Co., Ltd
 ✉:support@mlccbase.com
 ☎:+86 180 0256 1802
 📍:4001 United Plaza,
 Shenzhen, 518033

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 ☎:+852 8191 5188
 📍:59 King Yip Street,
 Kwun Tong,
 KowLoon, HongKong

UK Office
 Mlccbase Manufacturing Ltd
 ✉:ukb@mlccbase.com
 ☎:+44 20 3289 9866
 📍:Unit 1804, South Bank
 Tower, 55 Upper Ground,
 London, England SE1 9EY

As Manufacturer



01

Established in 2013, our factory is situated in Huizhou, a neighboring city of Shenzhen. It occupies a land area of 60 acres and encompassing a modern production workshop of over 430,556 square feet.

Our leading products include MLCC capacitors, semiconductor diodes, bridge rectifiers, thick film chip resistors and solar photovoltaic modules. We have developed over 2,000 product SKUs in seven major series, with an annual production capacity of over 10 billion units.



Chip Capacitor



Chip Resistor



SMD Diode



SMD Transistor



Bridge Rectifier

04

With advanced manufacturing, processing, and testing equipment, we implement process control concepts to guarantee that every step, from raw material procurement to final inspection, is closely monitored and documented. This reinforces our commitment to delivering high-performance products to the global market while reducing the environmental impact.



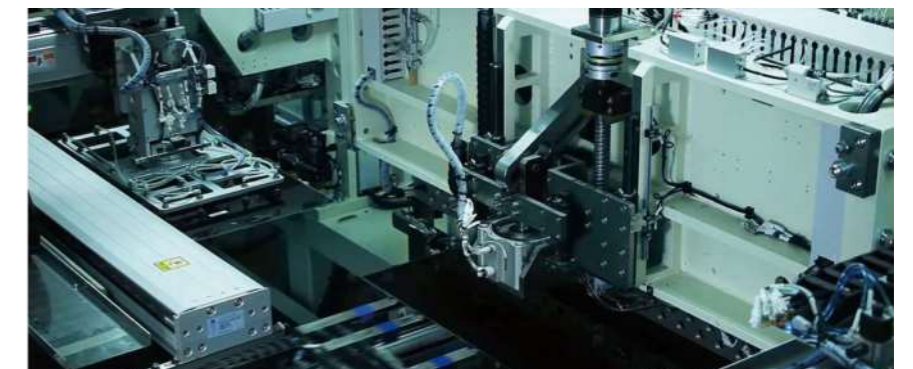
02

Our team consists of over 800 highly dedicated employees, with more than 80 in R&D to fulfill our ambition for growth and innovation. We prioritize creating a positive work environment that fosters growth and development.

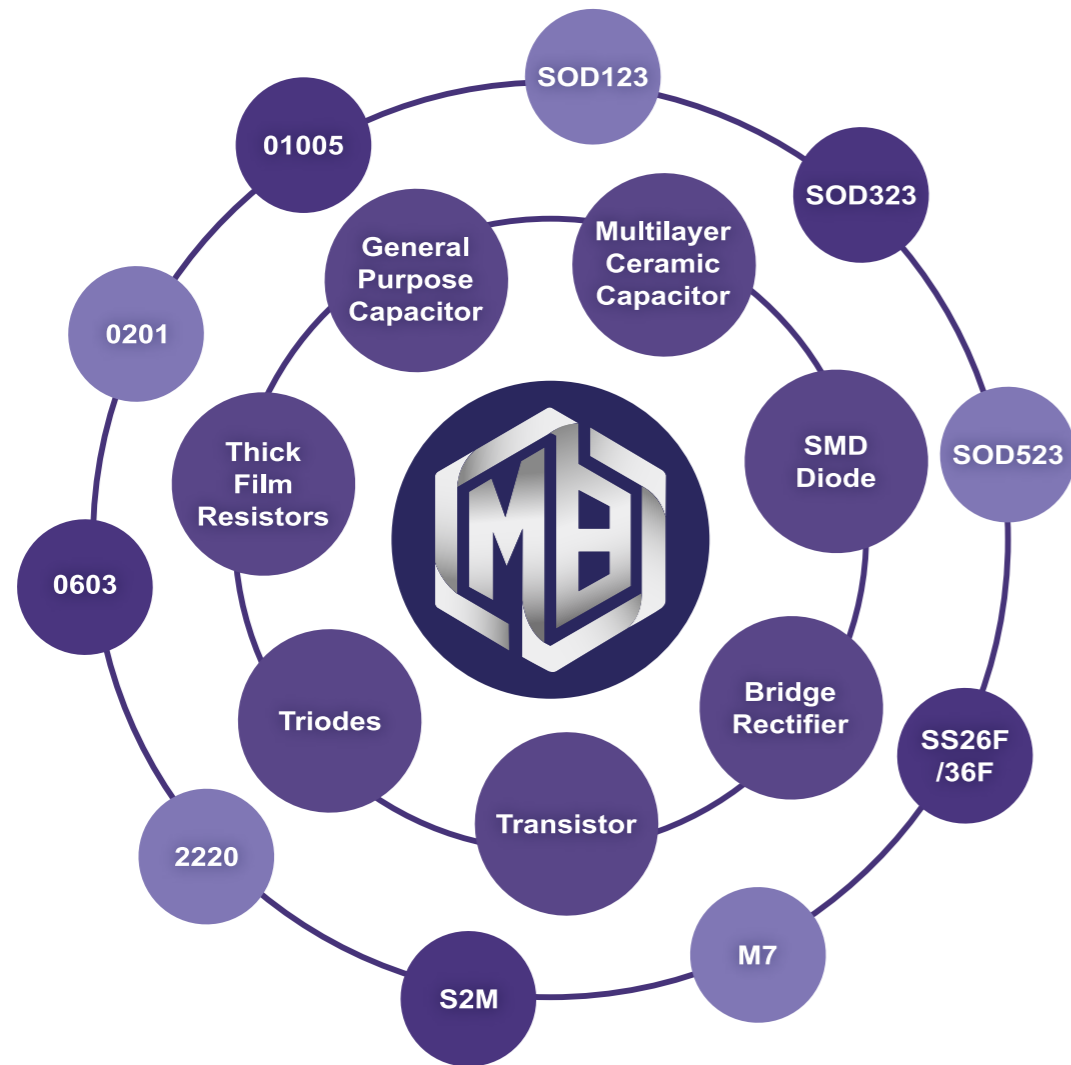
03

We are proudly certified by ISO 9001 ISO14001 and ISO45001, among other internationally recognized qualifications like UL and RoHS.

Our quality management system delivers product that meets customers' requirements while continually improving our operational processes.



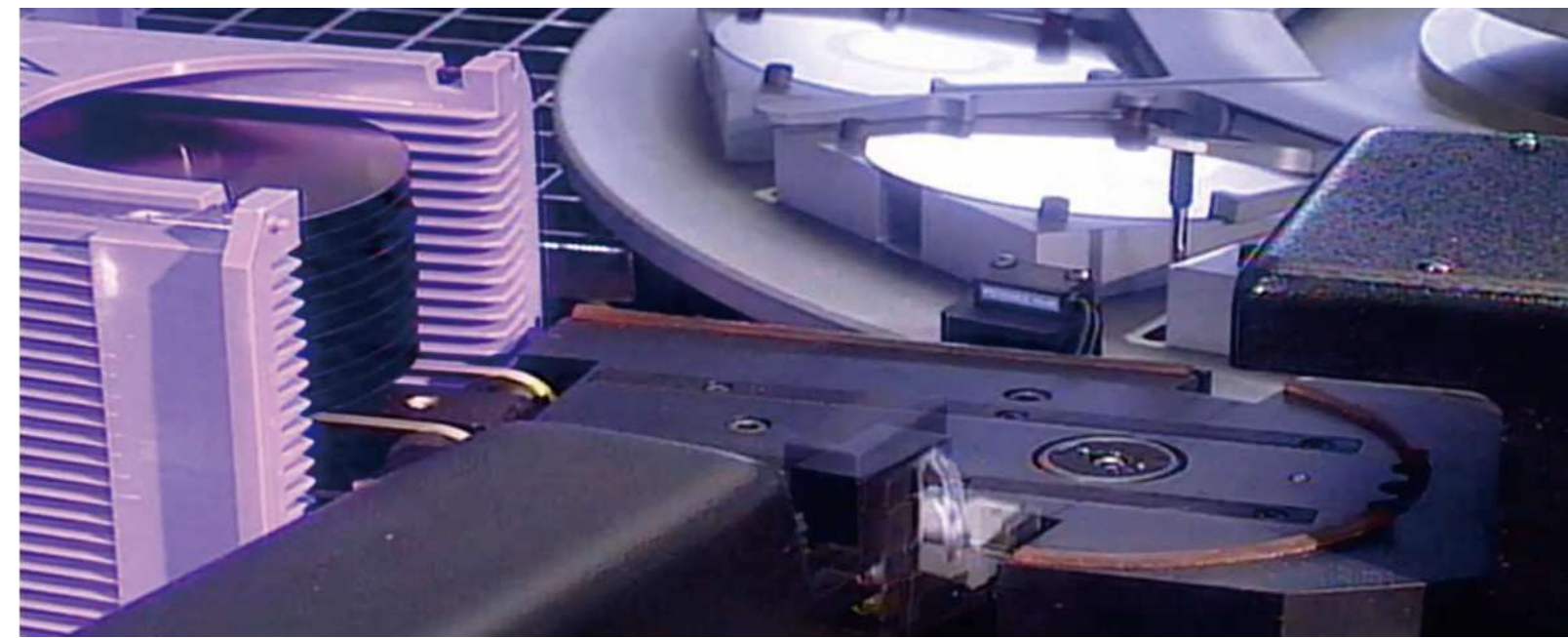
Product Overview



The company name MLCCBASE is inspired by our specialization in the research, development, and production of Multilayer Ceramic Chip Capacitors (MLCC). With millions in stock, our comprehensive range of products features a diverse selection of materials, voltage tolerances, and sizes, such as 0201, 0402, 0603, 0805, 1206, 1210, 1812, 2010, 2220, 2225, and 2512. This variety ensures that we can provide versatile solutions for various applications across different industries.

In addition to MLCCs, our diverse product range features

- Rectifier Bridges (MBS, MBF, MBM, ABS, DIP, GBU, KBP, D3K, KBL, KBJ, KBPC among others)
- Standard Rectifier Diodes (STD)
- Ultra-Fast Recovery Diodes (FR, HER, UF, SF)
- Schottky Diodes (SKY)
- Transient Voltage Suppressor Diodes (TVS)
- Specialized diodes for solar cell module protection
- Solar cell module junction boxes
- Connectors
- Silicon diodes
- Rectifier chips.



We have developed an innovative **mini rectifier bridge (MIN-DIP)** which offers 30% reduction in overall thickness while providing superior heat dissipation capabilities.

By utilizing GPP non-acid washing production processes, our bridge rectifier series meets stringent national environmental standards for green manufacturing. These components are used in rectification circuits for advanced electronic products, providing the foundation for miniaturization and scalability.

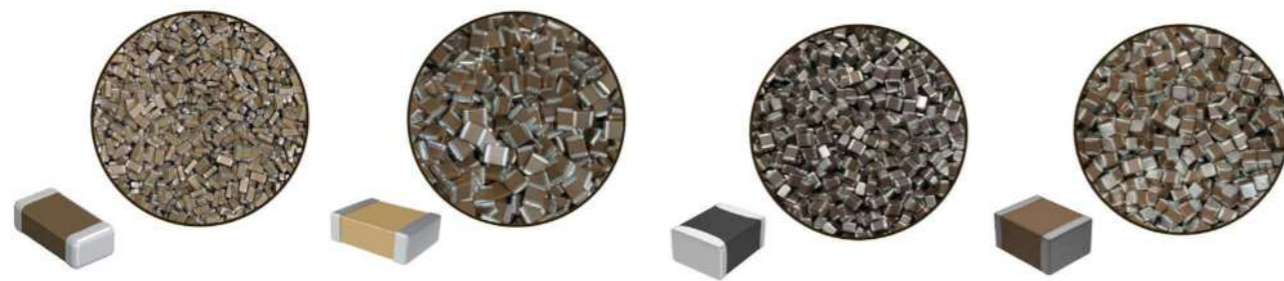
Our axial product range covers series such as STD, FR, HER, UF, SF, SKY, and TVS among other, which are widely used in industries including household appliances, power supplies, energy-saving lamps, chargers, automotive protection, routers, instrumentation, and solar photovoltaics.

Our **surface-mount diodes** features SMA, SMB, SOD123FL, SMAF, SMBF, and SMCF. They are the upgraded version of standard axial semiconductor diodes, featuring compact design, high power capabilities and environmentally friendly production methods.

Our **schottky (SKY) diodes** and **fast recovery diodes (SFRD)** are primarily used in AC voltage regulation, contactless electronic switches, inverters, and frequency converters found in applications such as device chargers, LED driver power supplies, household appliances, computer equipment, and consumer electronics power management modules.



Multilayer Ceramic Capacitor



Part Number Explanation



(1) Make Symbol

M = MLCCBASE™



(2) Series Code

C = Multilayer Ceramic Capacitors

(3) Size Code

Code	mm	Code	mm	Code	mm	Code	mm
01005	(0402)	0603	(1608)	1210	(3225)	2220	(5750)
0201	(0603)	0805	(2012)	1808	(4520)		
0402	(1005)	1206	(3216)	1812	(4532)		

(4) Dielectric Code

Code	Symbol	Working Temperature/°C	Temperature Coefficient(ppm/°C)
NPO	N	-55 / +125	0±30
Code	Symbol	Working Temperature/°C	Capacitance Change/%
X5R	A	-55 / +85	±15
X7R	B	-55 / +125	±15
X6S	C	-55 / +105	±22
Y5V	Y	-30 / +85	-82/+22
X7S	D	-55 / +125	±22
X7T	E	-55 / +125	-33/+22

(5) Capacitance Code

Capacitance expressed in pF. 2 significant digits plus number of zeros.

For example, 106=10*106=10,000,000pF.

For Values < 10pF, Letter R denotes decimal point.

For example, 1R5 = 1.5pF

(6) Capacitance Tolerance Code

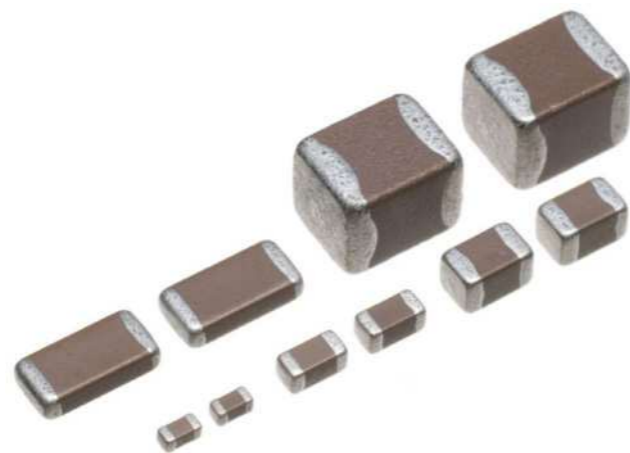
Code	Tol	Code	Tol	Code	Tol	Code	Tol
N	±0.03pF	H	+0.25pF	F*	±1%	V	-5%
A	±0.05pF	L	-0.25pF	G	±2%	K	±10%
B	±0.1pF	D	±0.5pF	J	±5%	M	±20%
C	±0.25pF	F	±0.1pF	U	+5%	Z	-20/+80%

△ * For Values <10pF, F=±1pF, Values ≥10pF, F=±1%

(7) Rated Voltage Code

Code	Vol	Code	Vol	Code	Vol	Code	Vol
2R5	2.5Vdc	1S6	16Vdc	1B0	100Vdc	6B3	630Vdc
4R0	4.0Vdc	2S5	25Vdc	2B0	200Vdc	1Q0	1KVdc
6R3	6.3Vdc	3S5	35Vdc	2B5	250Vdc	2Q0	2KVdc
1S0	10Vdc	5S0	50Vdc	5B0	500Vdc	3Q0	3KVdc

Optional sizes ranging from 0402 inches to 2220 inches are available, with a wide capacitance range that allows them to work reliably on PCBs. They can be placed automatically at high speed with a high degree of precision.



Official Label Reading

The diagram shows an MLCC label with the following information and callouts:

- Part Number:** MC0603X7R104K5S0 (top and middle)
- Lot Number:** CA001MX2137D0908 (bottom left)
- Thickness:** 0.85T (top right)
- Quantity:** 4000 (top right)
- Specification:** SMDC 0603 X7R ±10% 50V 104 (middle right)
- Origin Info:** ORIGIN: (SA) QTY:4000 PCS DC:2137 (middle right)

The label also features a barcode, the text "0603 B 100nF", and logos for "RoHS Compliant" and "MLCCBASE".

Standard & High Capacitance Table (NP0)

Size Inch (mm)	Rate Volt (Vdc)	Capacitance																																					
		pF															nF																						
		0.5	1.0	10	15	27	33	56	68	120	180	220	270	330	470	560	750	910	1.0	1.2	1.5	1.8	2.2	3.9	4.7	6.8	8.2	10	15	27	33	39	47	68	100	120			
0402 (1005)	10																																						
	16																																						
	25																																						
	50																																						
0603 (1608)	16																																						
	25																																						
	50																																						
0805 (2012)	25																																						
	50																																						
1206 (3216)	16																																						
	25																																						
	50																																						
	100																																						
1210 (3225)	25																																						
	50																																						

Standard & High Capacitance Table (X5R)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance												
		nF			uF									
		100	220	470	1.0	2.2	4.7	10	22	47	100	220		
0402 (1005)	4.0													
	6.3													
	10													
	16													
	25													
0603 (1608)	35													
	4.0													
	6.3													
	10													
	16													
0805 (2012)	25													
	35													
	50													
	4.0													
	6.3													
1206 (3216)	10													
	16													
	25													
	35													
	50													
1210 (3225)	6.3													
	10													
	16													
	25													
	35													
1812 (4532)	50													
	6.3													
2220 (5750)	6.3													
	10													

Standard & High Capacitance Table (X6S)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance												
		nF			uF									
		100	220	470	1.0	2.2	4.7	10	22	47	100			
0402 (1005)	2.5													
	4.0													
	6.3													
	10													
0603 (1608)	25													
	4.0													
	6.3													
	10													
0805 (2012)	16													
	25													
	4.0													
	6.3													
1206 (3216)	10													
	16													
	25													
	4.0													
1210 (3225)	6.3													
	10													
	16													
	25													

Standard & High Capacitance Table (X7R)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance													
		nF					uF								
		47	100	220	330	470	1.0	2.2	3.3	4.7	10	22	47	100	
0402 (1005)	6.3						X7S								
	10														
	16														
	25														
	50														
0603 (1608)	6.3									X7S					
	10														
	16														
	25														
	50														
0805 (2012)	6.3														
	10														
	16														
	25														
	35														
	50														
1206 (3216)	6.3														
	10														
	16														
	25														
	35														
	50														
1210 (3225)	6.3													X7T	
	10														
	16														
	25														
	35														
	50														

Super Small Size Capacitance Table (NP0)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance (pF)						
		0.2	0.5	1.0	10	22	47	100
01005 (0402)	6.3							
	16							
	25						27pF	
0201 (0603)	6.3							
	25							
	50							

Super Small Size Capacitance Table (X5R)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance																			
		pF				nF										uF					
		220	330	470	680	1.0	2.2	3.3	4.7	10	15	22	33	47	68	100	220	470	1.0	2.2	
01005 (0402)	4.0																				
	6.3																				
	10																				
0201 (0603)	4.0																				
	6.3																				
	10																				
	16																				
	25																				

Super Small Size Capacitance Table (X6S)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance (nF)							
		2.2	3.3	4.7	6.8	10	22	47	100
01005 (0402)	2.5								
0201 (0603)	4.0								
	6.3								

Super Small Size Capacitance Table (X7R)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance												
		pF					nF							
		100	220	330	470	680	1.0	2.2	3.3	4.7	6.8	10		
01005 (0402)	10													
0201 (0603)	6.3													
	10													
	16													
	25													
	50													

Medium & High Voltage Capacitance Table (NP0)

Size Inch (mm)	Rate Volt (Vdc)	Capacitance																																		
		pF															nF																			
		47	100	120	150	180	220	270	330	390	470	560	680	820	1.0	1.2	1.5	1.8	2.2	2.7	3.3	3.9	4.7	5.6	6.8	8.2	10	12	15	18	22	27	33	47	56	68
0402 (1005)	100																																			
0603 (1608)	100																																			
	200																																			
	250																																			
0805 (2012)	100																																			
	200																																			
	250																																			
	500																																			
1206 (3216)	100																																			
	200																																			
	250																																			
	500																																			
	630																																			
	1K																																			
1206 (3216)	1K																																			
	2K																																			
Size Inch (mm)	Rate Volt (Vdc)	Capacitance																																		
		pF															nF																			
		47	100	120	150	180	220	270	330	390	470	560	680	820	1.0	1.2	1.5	1.8	2.2	2.7	3.3	3.9	4.7	5.6	6.8	8.2	10	12	15	18	22	27	33	47	56	68
1210 (3225)	100																																			
	200																																			
	250																																			
	500																																			
	630																																			
	1K																																			
1210 (3225)	2K																																			
	3K																																			
1808 (4520)	2K																																			
	3K																																			
1812 (4532)	100																																			
	200																																			
	250																																			
	500																																			
	630																																			
	1K																																			
1812 (4532)	2K																																			
	3K																																			
	3K																																			
2220 (5750)	100																																			
	200																																			
	250																																			
	500																																			
	630																																			
	1K	2.2 ~ 3.6																																		
2220 (5750)	2K																																			
	3K																																			

Medium & High Voltage Capacitance Table (X7R)

Size Inch (mm)	Rated Voltage (Vdc)	Capacitance																							
		nF																uF							
		1.0	1.5	2.2	3.3	4.7	6.8	10	15	22	33	47	68	100	150	220	330	470	680	1.0	1.5	2.2	3.3	4.7	
0603 (1608)	100																								
0805 (2012)	100																								
	250																								
1206 (3216)	100																								
	200																								
	250																								
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	1K																								
1206 (3216)	2K																								
	2K																								
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	500																								
	630																								
1210 (3225)	1K																								
	2K																								
1808 (4520)	2K																								
	3K																								
1812 (4532)	100																								
	200																								
	250																								
	500																								
	630																								
1812 (4532)	1K																								
	2K																								
Size Inch (mm)	Rated Voltage (Vdc)	Capacitance																							
		nF																uF							
		1.0	1.5	2.2	3.3	4.7	6.8	10	15	22	33	47	68	100	150	220	330	470	680	1.0	1.5	2.2	3.3	4.7	
2220 (5750)	100																								
	200																								
	250																								
	500																								
	630																								
	1K																								
2220 (5750)	2K																								
	2K																								



Test Report

Report No. BCTC2005000645R Date: May 13, 2020

Applicant : SHENZHEN MANYGOGO E-COMMERCE CO LTD
Address : 5C219, 5/F, 2/B Huaqiang Electronic World, No.1005/1007/1015 Huaqiang North Road, Huahang Community, Huaqiang North Street, Futian District, Shenzhen
The submitted sample and sample information was/were submitted and identified by/on the behalf of the client
Sample name : Multiple Layers Ceramic Capacitor
Testing type /model : 2220
Additional type /model : 0201, 0402, 0603, 0805, 1206, 1210, 1812
Scope of application : NPO, X5R, X7R, X6S, Y5V, X7S.
Trademark : 
Manufacturer : SHENZHEN MANYGOGO E-COMMERCE CO LTD
Address : 5C219, 5/F, 2/B Huaqiang Electronic World, No.1005/1007/1015 Huaqiang North Road, Huahang Community, Huaqiang North Street, Futian District, Shenzhen
Sample received date : May 08, 2020
Testing period : May 08, 2020 - May 13, 2020
Test requested : As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate(DIBP), Dibutyl phthalate(DBP), Butyl benzyl phthalate(BBP), Bis(2-ethylhexyl) phthalate(DEHP) in the submitted sample(s).

According to the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863

*****For more detailed information, please refer to the next page*****

Tested by Ace
Ace



Approved by Saher Chen
Saher Chen
Manager



Test Report

Report No. BCTC2005000645R Date: May 13, 2020

Test Method:

Tested Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Mercury(Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321-7-2:2017 Ed.1.0	UV-Vis
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015 Ed.1.0	HPLC-UV
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015 Ed.1.0	HPLC-UV
Phthalates	IEC 62321-8:2017 Ed.1.0	GC-MS

Tested Sample/Part Description:

- 1 SMD capacitor

Test Result(s):

Tested Item(s)	Results Unit (mg/kg)	MDL Unit (mg/kg)	Limit Unit (mg/kg)
	1		
Lead (Pb)	N.D.	2	1000
Cadmium (Cd)	N.D.	2	100
Mercury (Hg)	N.D.	2	1000
Hexavalent Chromium (Cr(VI))	N.D.	8	1000

Remark: Manygogo operates as a subsidiary of MLCCbase and is responsible for managing international e-commerce business activities for the parent company. This note aims to provide clarification regarding the relationship between the two entities and to confirm that the tested product is the property of MLCCbase.



Test Report

Report No. BCTC2005000645R

Date: May 13, 2020

Tested Item(s)	Results Unit (mg/kg)	MDL Unit (mg/kg)	Limit Unit (mg/kg)
	1		
Polybrominated Biphenyls(PBBs)	N.D.	--	1000
Monobromobiphenyl	N.D.	5	--
Dibromobiphenyl	N.D.	5	--
Tribromobiphenyl	N.D.	5	--
Tetrabromobiphenyl	N.D.	5	--
Pentabromobiphenyl	N.D.	5	--
Hexabromobiphenyl	N.D.	5	--
Heptabromobiphenyl	N.D.	5	--
Octabromobiphenyl	N.D.	5	--
Nonabromobiphenyl	N.D.	5	--
Decabromobiphenyl	N.D.	5	--
Polybrominated Diphenyl Ethers(PBDEs)	N.D.	--	1000
Monobromodiphenyl ether	N.D.	5	--
Dibromodiphenyl ether	N.D.	5	--
Tribromodiphenyl ether	N.D.	5	--
Tetrabromodiphenyl ether	N.D.	5	--
Pentabromodiphenyl ether	N.D.	5	--
Hexabromodiphenyl ether	N.D.	5	--
Heptabromodiphenyl ether	N.D.	5	--
Octabromodiphenyl ether	N.D.	5	--
Nonabromodiphenyl ether	N.D.	5	--
Decabromodiphenyl ether	N.D.	5	--

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Test Report

Report No. BCTC2005000645R

Date: May 13, 2020

Tested Item(s)	Results Unit (mg/kg)	MDL Unit (mg/kg)	Limit Unit (mg/kg)
	1		
Diisobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	50	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	50	1000
Butyl benzyl phthalate(BBP) CAS #:85-68-7	N.D.	50	1000
Bis(2-ethylhexyl) phthalate(DEHP) CAS #:117-81-7	N.D.	50	1000

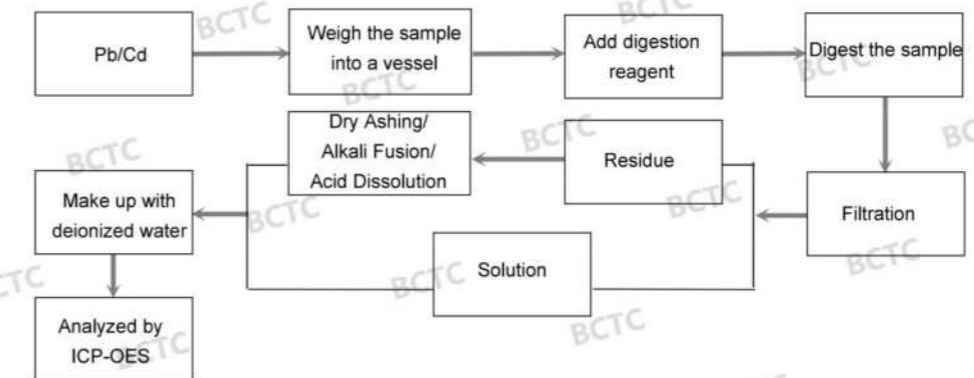
Note:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- "-" = Not regulated.
- mg/kg = ppm = parts per million

Test Process:

The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

◆IEC 62321-5:2013 Ed.1.0



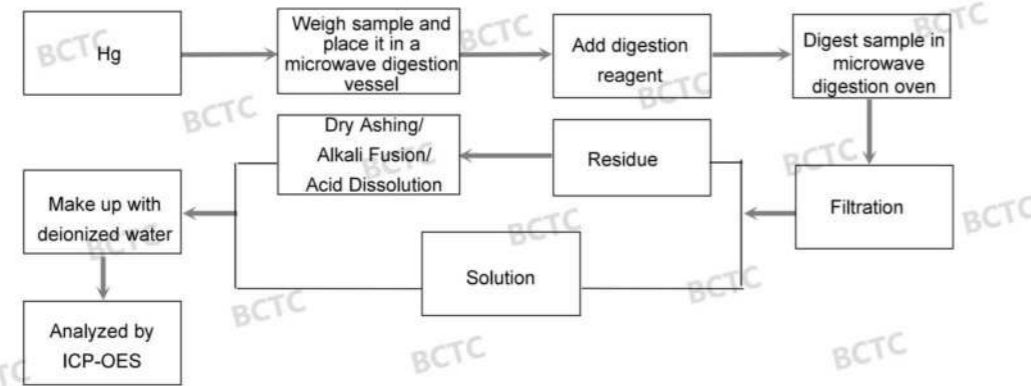
Test Report Tel: 400-788-9558 Web: https://www.bctc-lab.com BCTC/RF-CH-007 Ver.: A.0 Page 4 of 11



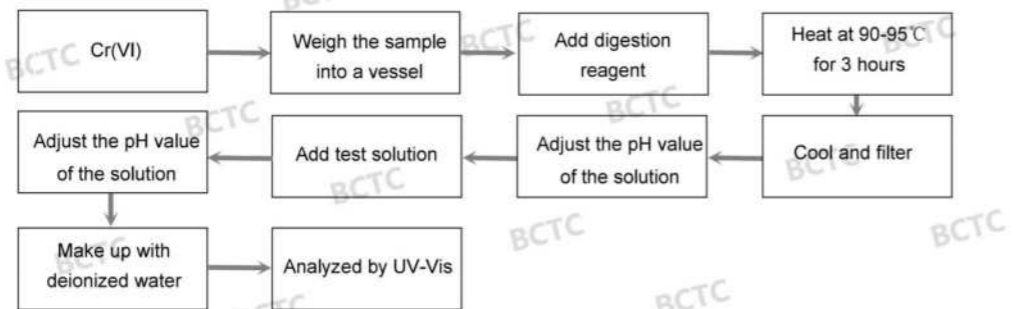
Test Report

Report No. BCTC2005000645R Date: May 13, 2020

◆ IEC 62321-4:2013+AMD1:2017



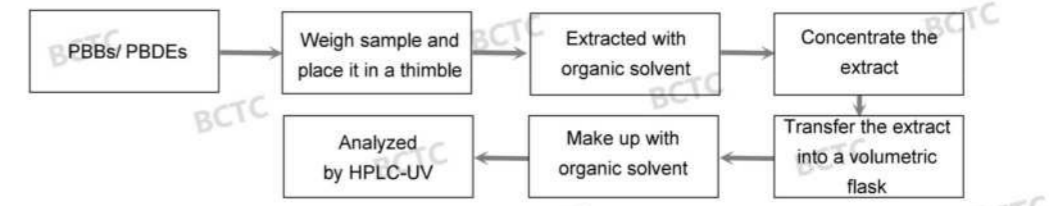
◆ IEC 62321-7-2:2017 Ed.1.0



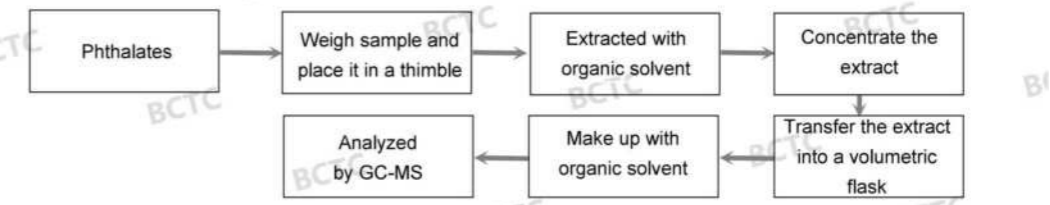
Test Report

Report No. BCTC2005000645R Date: May 13, 2020

◆ IEC 62321-6:2015 Ed.1.0



◆ IEC 62321-8:2017 Ed.1.0





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Photograph of Sample

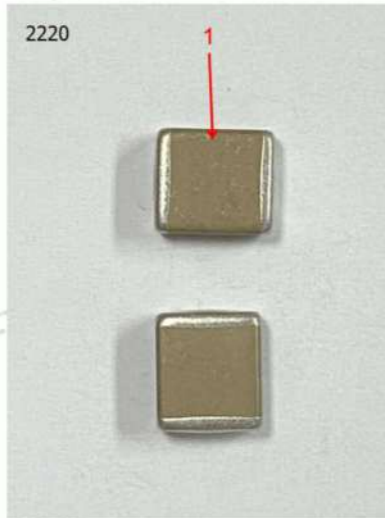


Fig.1



Fig.2



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Fig.3



Fig.4



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Fig.5



Fig.6



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Fig.7



Fig.8



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STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without stamp of laboratory.
4. The test report is invalid without signature of person(s) testing and authorizing.
5. The test process and test result is only related to the Unit Under Test.
6. The quality system of our laboratory is in accordance with ISO/IEC17025.
7. If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address: BCTC Building & 1-2F, East of B Building, Pengzhou Industrial, Fuyuan 1st Road, Qiaotou Community, Fuyong Street, Bao'an District, Shenzhen, China
 P.C.: 518103
 TEL: 400-788-9558 FAX: 0755-33229357
 Internet: <http://www.bctc-lab.com> E-Mail: bctc@bctc-lab.com.cn

***** END OF REPORT *****

Test Report Tel: 400-788-9558 Web: <https://www.bctc-lab.com> BCTC/RF-CH-007 Ver.: A.0 Page 11 of 11

Product Catalog -- Resistors

Resistor



General Thick Film Chip Resistors

(1) Scope

This specification is applied to the MR Series for General thick film chip resistors

M = MLCCBASE™ R = Resistors

(2) Features

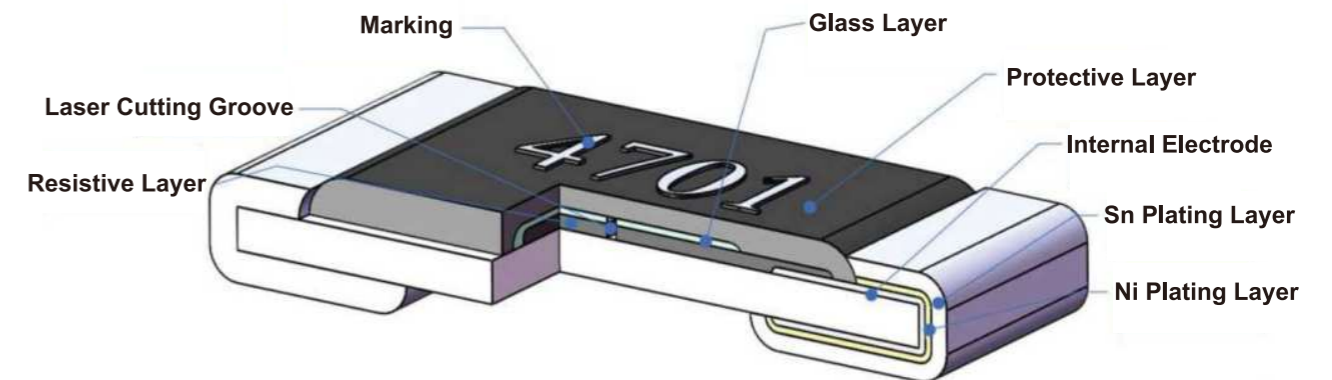
- Small size and lightweight
- High stability in electrical performance and excellent reliability
- Consistent and uniform appearance
- Compatible with automatic SMT equipment through tape or bulk packaging
- Suitable for both wave and reflow soldering
- Compliant with RoHS directive and halogen-free requirements

(3) Part Number Explanation

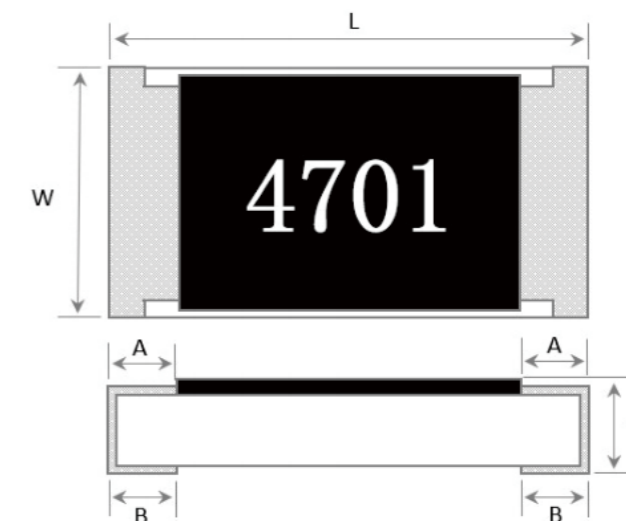
EX: MR0805F4K7-0705RL

MR	0805	F	4K7	0705RL
Product type	Type code	Resistance tolerance	Resistance	Packaging
General Thick Film Chip Resistors	0201	J:±5%	3 digits: E-24 Series	0704RL:
	0402	G:±2%	Example:	7" Tape&Reel
	0603	F:±1%	102=1K0	4000 Pieces
	0805	P:Jumper	103=10K	
	1206		472=4K7	0705RL:
	1210			7" Tape&Reel
	2010		4 digits: E-96 Series	5000 Pieces
	2512		Example:	0710RL:
		1001=1K0	7" Tape&Reel	
		1002=10K	10000 Pieces	
		4701=4K7		

(4) Construction



(5) Dimension



Type	L	W	T	A	B
0201	0.60 ±0.05	0.30 ±0.05	0.23 ± 0.05	0.10 ±0.05	0.15 ± 0.05
0402	1.00±0.10	0.50 ±0.10	0.35 ±0.05	0.20 ±0.10	0.20 ±0.10
0603	1.60 ±0.15	0.80 ±0.15	0.45 ±0.10	0.30 ±0.15	0.30 ±0.15
0805	2.00 ±0.20	1.25 ±0.15	0.50 ±0.10	0.40 ±0.15	0.40 ±0.15
1206	3.10 ±0.20	1.60 ±0.15	0.55 ±0.10	0.50 ±0.20	0.40 ±0.20
1210	3.10 ±0.20	2.50 ±0.15	0.55 ±0.10	0.50 ±0.20	0.45 ± 0.20
2010	5.00 ±0.20	2.50 ±0.20	0.55 ±0.10	0.60 ±0.20	0.60 ±0.20
2512	6.40 ±0.20	3.20 ±0.20	0.55 ±0.10	0.60 ±0.20	0.60 ±0.20

(6) Ratings & Characteristics

Type	(Power Rating at 70°C)	Max.RCWV	Overload Voltage	Variations	E24&E96	T.C.R. (PPM/°C)	Jumper Resistance Range	Jumper Rated Current
0201	1/20W	25V	50V	±5%	1R ~ 10R	-200 ~ +500	Max. 50mΩ	0.5A
				±2%	10R ~ 100R	-200 ~ +200		
					100R ~ 10M	-100 ~ +100		
0402	1/16W	50V	100V	±5%	1R ~ 10R	-200 ~ +500	Max. 50mΩ	1A
				±2%	10R ~ 100R	-200 ~ +200		
				±1%	100R ~ 10M	-100 ~ +100		
0603	1/10W	50V	100V	±5%	1R ~ 10R	-200 ~ +400	Max. 50mΩ	1A
				±2%	10R ~ 100R	-200 ~ +200		
				±1%	100R ~ 10M	-100 ~ +100		
0805	1/8W	150V	300V	±5%	1R ~ 10R	-200 ~ +400	Max. 50mΩ	2A
				±2%	10R ~ 100R	-200 ~ +200		
				±1%	100R ~ 10M	-100 ~ +100		
1206	1/4W	200V	400V	±5%	1R ~ 10R	-200 ~ +400	Max. 50mΩ	2A
				±2%	10R ~ 100R	-200 ~ +200		
				±1%	100R ~ 10M	-100 ~ +100		
1210	1/3W	200V	400V	±5%	1R ~ 10R	-200 ~ +300	Max. 50mΩ	2A
				±2%	10R ~ 100R	-150 ~ +150		
				±1%	100R ~ 10M	-100 ~ +100		
2010	1/2W	200V	400V	±5%	1R ~ 10R	-200 ~ +300	Max. 50mΩ	2A
				±2%	10R ~ 100R	-150 ~ +150		
				±1%	100R ~ 10M	-100 ~ +100		
2512	1W	200V	400V	±5%	1R ~ 10R	-200 ~ +300	Max. 50mΩ	2A
				±2%	10R ~ 100R	-150 ~ +150		
				±1%	100R ~ 10M	-100 ~ +100		

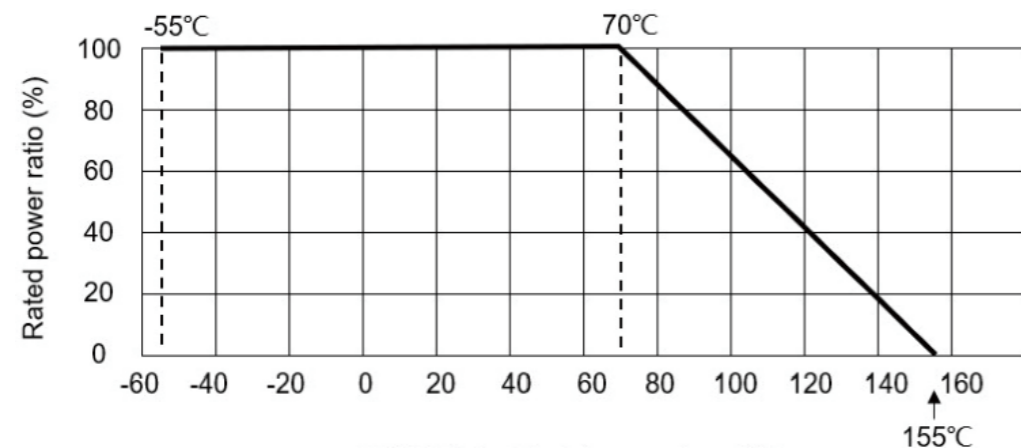
Note:

1.The rated working voltage is calculated using the formula $V=\sqrt{P \cdot R}$ (where P represents the rated power and R is the resistance value), or by using the maximum working voltage provided above, whichever is lower.

2.Operating Temperature Range: -55°C~+125°C.

(7) Derating Curve

For resistors operated in ambient over 70°C, rated load (rated power) shall be derated in accordance with the below figure.



(8) Performance

NO.	Test items	Reference Standard	Test methods	Specifications
1	Temperature Coefficient of Resistance (T.C.R)	JIS-C5201-1-4.8	>DC resistance values measurement >Temperature Coefficient of Resistance (T.C.R) Natural resistance change per change in degree centigrade. $\frac{R_2 - R_1}{R_1 (t_2 - t_1)} \times 10^6 \text{ (ppm/°C)}$ R1: under room temperature R2: under the temperature of -55°C or +155°C t1: room temperature (°C) t2: -55°C or +155°C (test temperature) R1: Resistance at reference temperature R2: Resistance at test temperature	Within Specified T.C.R
2	Short Time Overload	JIS-C5201-1-4.13	Permanent resistance change after 5 seconds application of a voltage 2.5 times RCWV or the maximum overload voltage specified in the above list, whichever is less	ΔR/R max.±(2%+0.05Ω); 0Ωmax. 50mΩ or less No visible damage
3	Bending	JIS-C5201-1-4.33	Resistors mounted on a 90mm glass epoxy resin PCB (FR4) ; bending: 3 mm, once for 10 seconds, bending speed 1 mm/s	ΔR/R max. ±1%+0.05Ω; 0Ωmax. 50mΩ or less. No Mechanical damage
4	Adhesion	JIS-C5201-1-4.32	Pressurizing force: 5N, Test time: 10±1sec.	No Mechanical damage
5	Temperature Cycling	JIS-C5201-1-4.19	30 minutes at-55°C±3°C, 5 minutes at 20°C: & 30 minutes at+155°C±3°C, 5 minutes at 2 0°C, total 5 continuous cycles	ΔR/R max. ±1%+0.05Ω; 0Ωmax. 50mΩ or less. No Mechanical damage
6	Resistance to Soldering Heat	JIS-C5201-1-4.18	Un-mounted chips completely immersed for 10±1 second in a SAC solder bath at 260°C±5°C	ΔR/R max. ±1%+0.05Ω; 0Ωmax. 50mΩ or less No Mechanical damage
7	Solderability	JIS-C5201-1-4.17	Un-mounted chips completely immersed for 2±0.5 second in a SAC solder bath at 235°C±5°C	At least 95% of surface area of electrode shall be covered with new solder
8	Load Life Humidity	JIS-C5201-1-4.24	1000 +48/-0 hours, loaded with RCWV or Vmax in humidity chamber controller at 40°C±2°C and 90-95% relative humidity, 1.5hours on and 0.5 hours off	ΔR/R max. ±(2%+0.05Ω) ; 0Ωmax. 50mΩ or less No Mechanical damage
9	Load Life	JIS-C5201-1-4.25	1000 +48/-0 hours, loaded with RCWV or Vmax in chamber controller 70±2°C, 1.5 hours on and 0.5 hours off	ΔR/R max. ±(2%+0.05Ω) ; 0Ωmax. 50mΩ or less No Mechanical damage

(9) Print Instruction:

Type	±5%&±2% (E-24 Series)	±1% (E-24 Series&E-96 Series)
0201/0402	No print	No print
0603	3 digits	3 digits
0805/1206/1210/ 2010/2512	3 digits	4 digits

(9.1) Type 0201 and 0402 do not have print because the sizes are too small.

(9.2) ±5%&±2% (E-24 Series): MR0603, MR0805, MR1206, use three digits.

(9.2.1) 10Ω and above, first two digits represent base, the third digit represents 10ⁿ.

(9.2.2) 10Ω and below, use "R" to represent digits.

E.G. 4.7Ω=4R7 47Ω=47R=47X10⁰=470 470Ω=470R=47X10¹=471
 4700Ω=4K7=47X10²=472 47000Ω=47K=47X10³=473 470000Ω=470K=47X10⁴=474
 4700000Ω=4M7=47X10⁵=475

E-24 Series

No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
1	10	6	16	11	27	16	43	21	68
2	11	7	18	12	30	17	47	22	75
3	12	8	20	13	33	18	51	23	82
4	13	9	22	14	36	19	56	24	91
5	15	10	24	15	39	20	62		

(9.3) ±1% (E-24 series & E-96 series): MR0805 and MR1206, use 4 digits.

(9.3.1) 100Ω and above, use first three digits to represent base, the fourth digits represents 10ⁿ.

(9.3.2) 100Ω and below, use "R" to represent digits.

E.G.: 1Ω=1R00 10Ω=10R0 100Ω=100R=100X10⁰=1000 1000Ω=1K00=100X10¹=1001
 10000Ω=10K0=100X10²=1002 100000Ω=100K=100X10³=1003 1000000Ω=1M00=100X10⁴=1004

(9.4) ±1% (E-24 series & E-96 series): MR0603, use 3 digits.

(9.4.1) E-24 series: use the same rules as ±5%, but underline the last digit.

E.G. 4.7Ω=4R7 47Ω=47R=47X10⁰=470 470Ω=470R=47X10¹=471 4700Ω=4K7=47X10²=472
 47000Ω=47K=47X10³=473 470000Ω=470K=47X10⁴=474 4700000Ω=4M7=47X10⁵=475

(9.4.2) E-96 series: use first 2 digits to represent resistors value, the 3rd digit uses capital letter to represent 10ⁿ.

E.G. 1.02Ω=1R02=102X10⁻²=02Y 10.2Ω=10R2=102X10⁻¹=02X 102Ω=102R=102X10⁰=02A
 1020Ω=1K02=102X10¹=02B 10200Ω=10K2=102X10²=02C 102000Ω=102K=102X10³=02D
 1020000Ω=1M02=102X10⁴=02E

(9.4.3) For duplicated numbers of E-24 series and E-96 series, use E-96 series as standard.

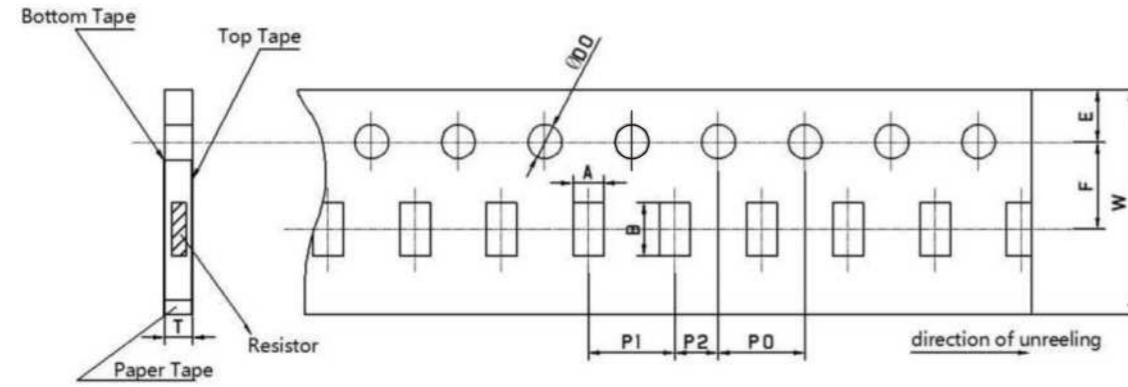
E.G. 1Ω=1R00=100X10⁻²=01Y 10Ω=10R0=100X10⁻¹=01X 100Ω=100R=100X10⁰=01A
 1000Ω=1K00=100X10¹=01B 10000Ω=10K0=100X10²=01C 100000Ω=100K=100X10³=01D
 1000000Ω=1M00=100X10⁴=01E

E-96 Series

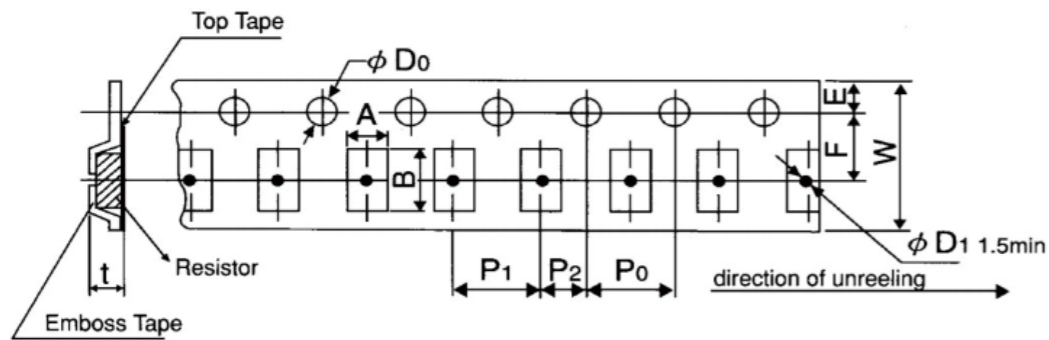
Value	Code	Value	Code	Value	Code	Value	Code	Value	Code
100	1	162	21	261	41	422	61	681	81
102	2	165	22	267	42	432	62	698	82
105	3	169	23	274	43	442	63	715	83
107	4	174	24	280	44	453	64	732	84
110	5	178	25	287	45	464	65	750	85
113	6	182	26	294	46	475	66	768	86
115	7	187	27	301	47	487	67	787	87
118	8	191	28	309	48	499	68	806	88
121	9	196	29	316	49	511	69	825	89
124	10	200	30	324	50	523	70	845	90
127	11	205	31	332	51	536	71	866	91
130	12	210	32	340	52	549	72	887	92
133	13	215	33	348	53	562	73	909	93
137	14	221	34	357	54	576	74	931	94
140	15	226	35	365	55	590	75	953	95
143	16	232	36	374	56	604	76	976	96
147	17	237	37	383	57	619	77		
150	18	243	38	392	58	634	78		
154	19	249	39	402	59	649	79		
158	20	255	40	412	60	665	80		

(10) Taping & Package

(10.1) Paper taping (fit for 0201/0402/0603/0805/1206/1210)



(10.2) Emboss Tape (fit for 2010/2512)

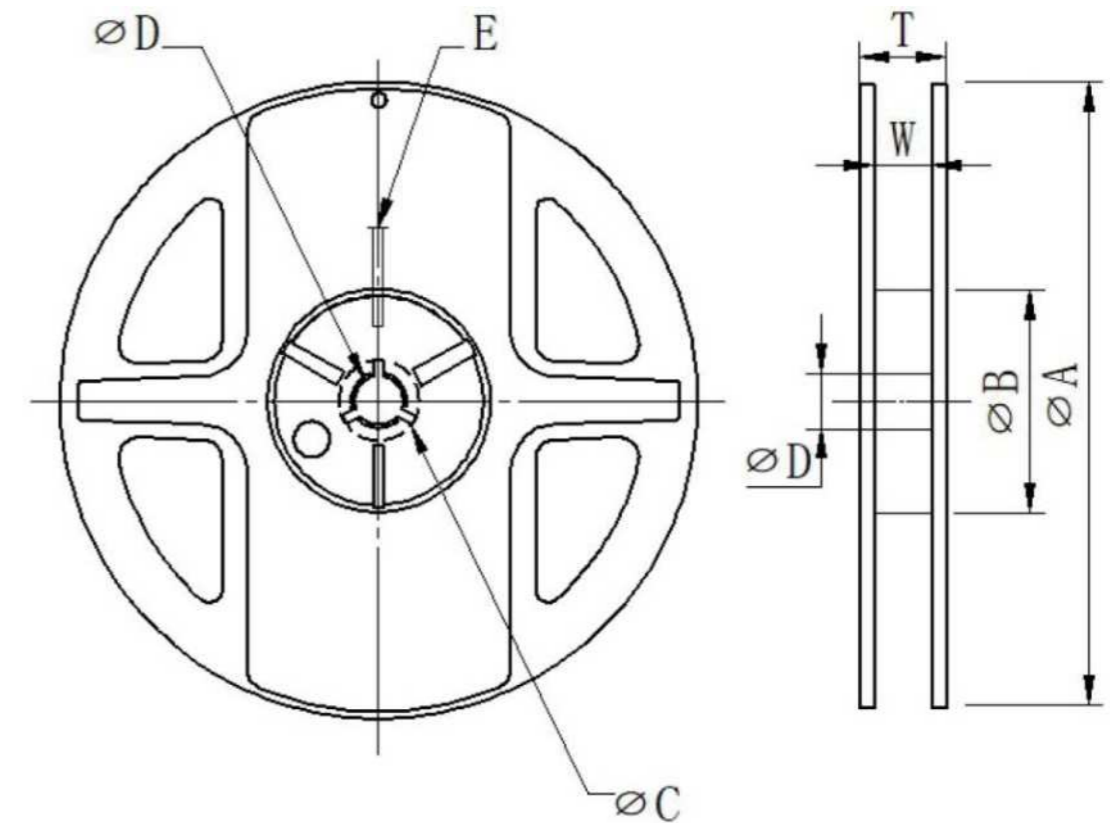


(10.2) Specification

Unit: mm

Type	A	B	W	F	E	P1	P2	P0	D0	T	D1
0201	0.45±0.1	0.75±0.1	8.0±0.1	3.5±0.05	1.75±0.1	2.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.35±0.1	-
0402	0.65±0.1	1.15±0.1	8.0±0.1	3.5±0.05	1.75±0.1	2.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.45±0.1	-
0603	1.05±0.15	1.85±0.15	8.0±0.1	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.60±0.1	-
0805	1.6±0.15	2.4±0.2	8.0±0.1	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.75±0.1	-
1206	2.0±0.15	3.6±0.2	8.0±0.1	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.75±0.1	-
1210	2.9±0.15	3.6±0.2	8.0±0.1	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	0.75±0.1	-
2010	2.8±0.15	5.6±0.2	12.0±0.1	5.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	1.00±0.1	Ø1.5±0.1
2512	3.4±0.15	6.7±0.2	12.0±0.1	5.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	Ø1.5±0.1	1.00±0.1	Ø1.5±0.1

(11) Reel Specification



Unit: mm

Type	Size	Numbers (pcs)	ØA	ØB	ØC	ØD	E	W	T
0402	7"	10000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	9.5±1.0	11.5±1.0
0603	7"	5000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	9.5±1.0	11.5±1.0
0805	7"	5000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	9.5±1.0	11.5±1.0
1206	7"	5000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	9.5±1.0	11.5±1.0
1210	7"	5000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	9.5±1.0	11.5±1.0
2010	7"	4000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	13.0±1.0	15.5±1.0
2512	7"	4000	178.0±1.0	60.0±1.0	21±0.5	13.0±0.5	2.0±0.5	13.0±1.0	15.5±1.0

Metal Current Sensing Chip Resistors

(1) Scope

This specification is applied to the MR Series Metal Current Sensing Chip Resistors.

M = MLCCBASE™ AR = Metal Current Sensing Chip Resistors

(2) Features

- High power handling capability, low inductance.
- Low temperature coefficient.
- High precision and accuracy, low noise.
- Compliant with RoHS directive and Halogen free requirement.

(3) Part Number Explanation

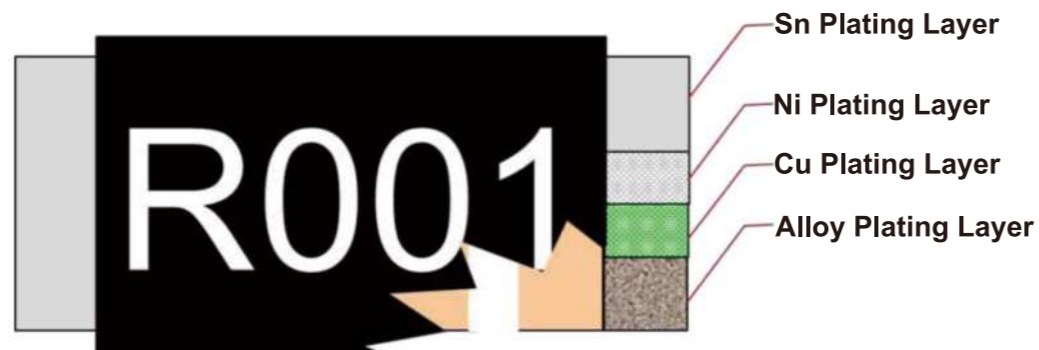
EX: MARC1206CFR001

M	ARC	1206	C	F	R001
Make Symbol	Type	Type code	Rated Power	Tolerance level	Tolerance value
MLCCBASE	ARC: 1W	1206	C=1W	F= ± 1% G= ± 2% J= ± 5%	eg: R001=1mΩ R019=10mΩ

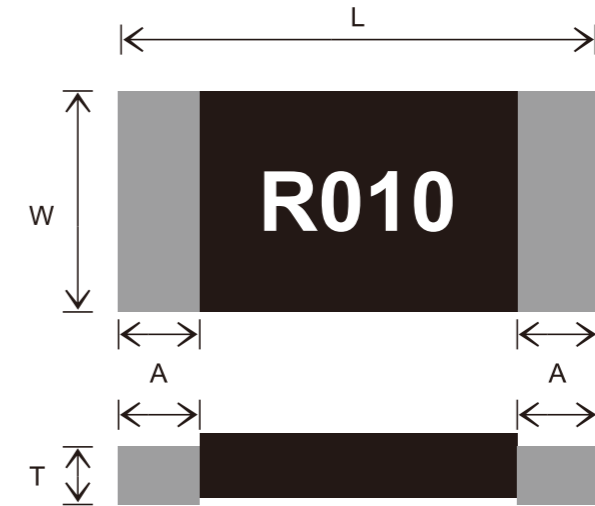
EX: MARM2512EFR001

M	ARM	2512	E	F	R001
Make Symbol	Type	Type code	Rated Power	Tolerance level	Tolerance value
MLCCBASE	ARM: 2W ARP: 3W ARD: 3W (large electrode)	2512	E=2W G=3W	F= ± 1% G= ± 2% J= ± 5%	eg: R001=1mΩ R019=10mΩ

(4) Construction



(5) Dimension



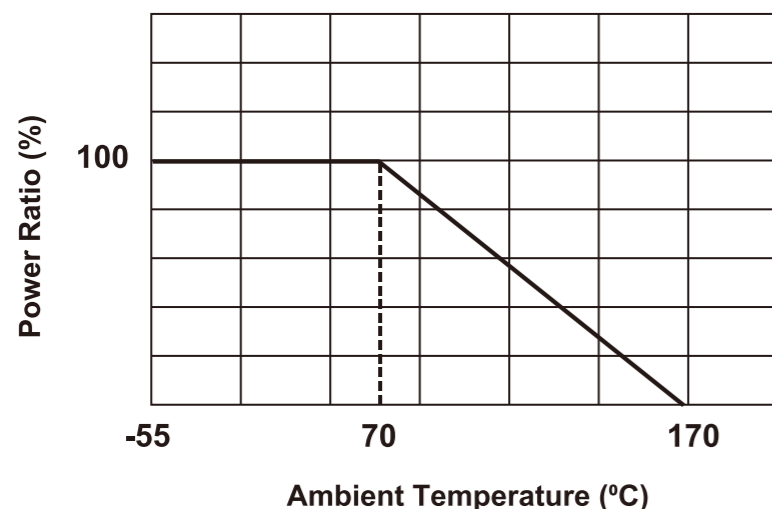
Type	L	W	T	A
MARC1206	3.20 ±0.20	1.60 ±0.20	0.50 ± 0.20	0.60 ±0.20 (1mΩ ≦ R ≦ 10mΩ)
				0.45 ±0.20 (10mΩ ≦ R ≦ 100mΩ)
MARM2512	6.40 ±0.20	3.20 ±0.20	0.9 ± 0.20	0.60 ±0.20
MARP2512	6.40 ±0.20	3.20 ±0.20	0.9 ± 0.20	0.60 ±0.20
MARD2512	6.40 ±0.20	3.20 ±0.20	2.0 ±0.20	0.75 ±0.20

(6) Ratings & Characteristics

Type	Value	
1206	Rated Power	1W
	TCR (Temperature Coefficient)	1~3mΩ ±100ppm/°C - ±350p ppm/°C
2512	Rated Power	2W/3W
	TCR (Temperature Coefficient)	0.5~4mΩ ±50ppm/°C/±100 ppm/°C
Working Temperature		-55°C~+170°C
Tolerance Level		±1%, ±2%, ±5%
Insulation Level		> 100MΩ
Maximum Working Voltage		(P*R) ^{1/2}

(7) Derating Curve

Operating temperature Range: -55°C~170°C, when the resistor is operating in an environment above 70°C, the maximum load should be reduced according to the following curve.

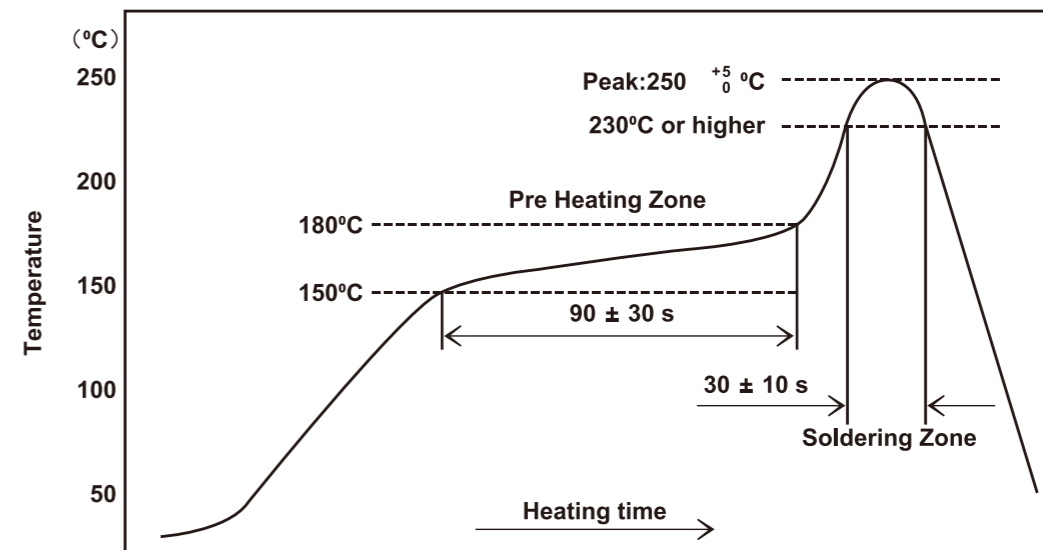


(8) Specifications

NO.	Test items	Reference Standard	Test methods	Specifications
1	Temperature Coefficient of Resistance (T.C.R)	JIS-C5201-1-4.8	>DC resistance values measurement >Temperature Coefficient of Resistance (T.C.R) Natural resistance change per change in degree centigrade. $\frac{R_2 - R_1}{R_1 (t_2 - t_1)} \times 10^6 \text{ (ppm/°C)}$ R1: under room temperature; R2: under the temperature of -55°C or +155°C t1: Room Temperature (°C) t2: -55°C or +155°C (test temperature) R1: Resistance at reference temperature R2: Resistance at test temperature	Within Specified T.C.R
2	Short Time Overload	JIS-C5201-1-4.13	Permanent resistance change after 5 seconds application of a voltage 2.5 times RCWV or the maximum overload voltage specified in the above list, whichever is less	$\Delta R/R \leq \pm(1\%+0.05\Omega)$
3	Bending	JIS-C5201-1-4.33	Bending radius of 2mm, holding time of 60s±5s.	$\Delta R \leq \pm (1.0\%+0.05m\Omega)$

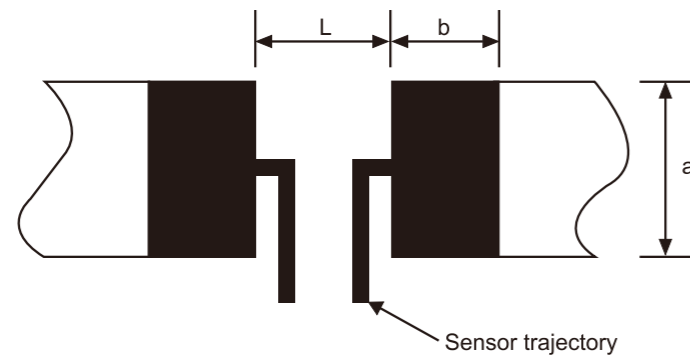
NO.	Test items	Reference Standard	Test methods	Specifications
4	Adhesion	JIS-C5201-1-4.32	Pressurizing force: 25N, Test time: 10±1sec.	No Mechanical damage
5	Temperature Cycling	JIS-C5201-1-4.19	30 minutes at -55°C±3°C, 5 minutes at 20°C : & 30 minutes at +155°C±3°C, 5 minutes at 20°C, total 5 continuous cycles	$\Delta R/R$ max. $\pm(1\%+0.05\Omega)$; 0Ωmax. 50mΩ or less No Mechanical damage
6	Resistance to Soldering Heat	JIS-C5201-1-4.18	Un-mounted chips completely immersed for 10±1 second in a SAC solder bath at 260°C±5°C	$\Delta R/R$ max. $\pm(1\%+0.05\Omega)$
7	Solderability	JIS-C5201-1-4.17	Un-mounted chips completely immersed for 2±0.5 second in a SAC solder bath at 235°C±5°C	At least 95% of surface area of electrode shall be covered with new solder
8	Load Life Humidity	JIS-C5201-1-4.24	1000 +48/-0 hours, loaded with RCWV or Vmax in humidity chamber controller at 40°C±2°C and 90-95% relative humidity, 1.5hours on and 0.5 hours off	$\Delta R/R$ max. $\pm(1\%+0.05\Omega)$; 0Ωmax. 50mΩ or less No Mechanical damage
9	Load Life	JIS-C5201-1-4.25	1000 +48/-0 hours, loaded with RCWV or Vmax in chamber controller 70±2°C, 1.5 hours on and 0.5 hours off	$\Delta R/R$ max. $\pm(1\%+0.05\Omega)$; 0Ωmax. 50mΩ or less No Mechanical damage

(9) Reflow Soldering Conditions:



Peak: 250 +5/-0 °C, 5 s
 Preheat Zone: 150~180°C, 90±30 s
 Soldering Zone : ≥230°C, 30±10 s

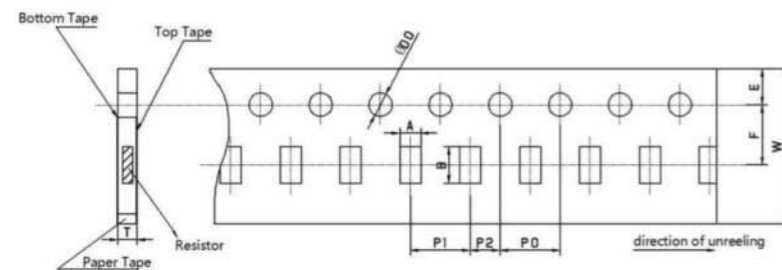
(10) PCB size:



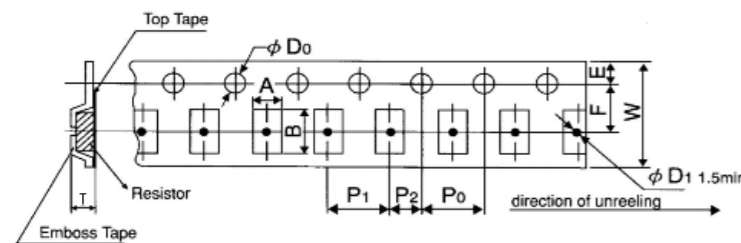
Type	Pattern mm		
	A	B	L
ARC1206	1.6	1.75	2.1
ARM2512/ ARP2512	3.2	1.8	4.6
ARD2512	3.2	2.0	2.4

(11) Taping & Package

(11.1) Paper taping (fit for 1206)

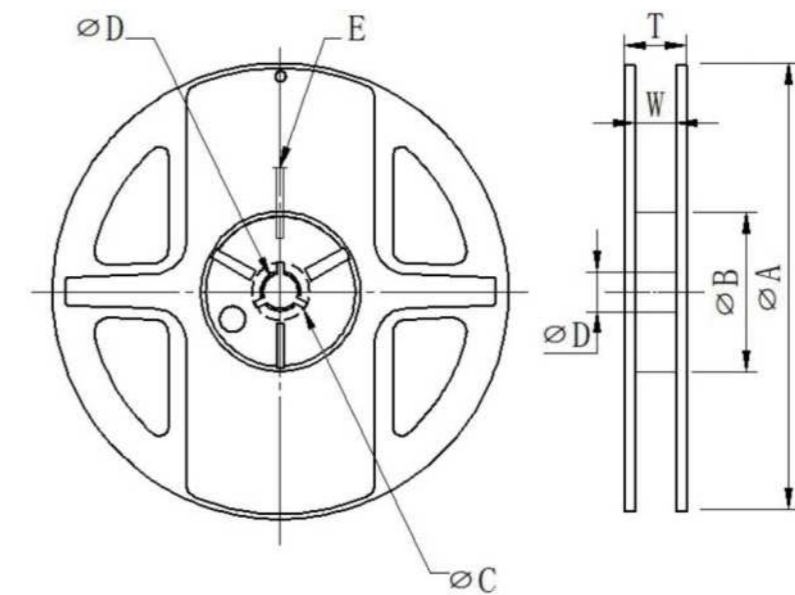


(11.2) Emboss Tape (fit for 2512)



Type	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀	T
1206	2.0±0.15	3.6±0.2	8.0±0.2	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.05	1.5±0.1	0.84±0.1
2512	3.5±0.1	6.8±0.1	12.0±0.1	5.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	1.5±0.1	1.0±0.1

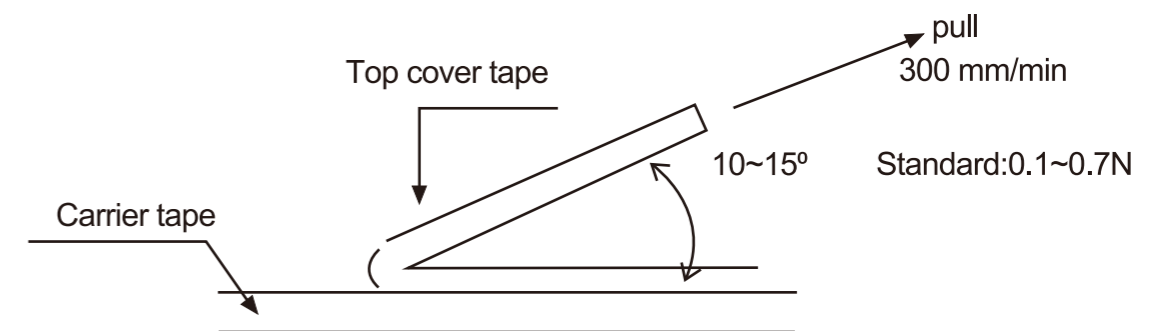
(12) Reel Specification



Series	A mm	B mm	D mm	E mm	T mm
1206	178±2.0	60±1.0	13.0±1.0	9.0±1.0	11.5±1.0
2512	178±2.0	60±1.0	13.0±1.0	9.0±1.0	15.4±1.0

(13) Tensile strength testing specifications:

Top Cover Peel Strength



Product Catalog -- Transistors

Transistor -- Major Products

Transistor



SOD123 PKG

1N4148W	SD103AW	1N5819W	1N5817W	BAV21W
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SOD323 PKG

1N4148WS	SD103AWS	1SS357	1N5817WS	1N5819WS	1SS355
1N4448WS	BAV21WS	DESD3Z5.0			

SOD523 PKG

1N4148WT	1SS400WT	1N4448WT	SD103AWT	RB521S-30	RB520S-30
BAV21WT	DESD5Z5.0				

SOT323 PKG

S9014W	S9015W	S8550W	S8050W	MMBT3904W	BAT54CW
BAT54SW	BAT54AW	MMBT5551W	BAV70W	BAV99W	2SK3018W
2SK3019W	2N7002K	BC2301-2.3A	BC2301-2.8A	SS8050W	BC846BW
BC847BW	BC848BW	BC856BW	BC857BW	BC858BW	MMBT5401W
MMBT3906W	SS8550W	MMUN2211	MMUN2212	DTC123	DTA123
DTA143	DTC124	DTC114EE			

SOT363 PKG

2N7002KDW	BC8402	BAT54BRW	BAT54CDW	BAT54WDW	BAT54TW
BAV70DW	BAV99DW	BAW56DW	BC846DW	BC846PN	BC847DW
BC847PN	BC856DW	BC857DW	MMBD4148HAQW	MMBD4448HSDW	MMBD4448HTW
MMDT3907ADW	MMDT4403DW	MMDT5451DW	MMDT2222ADW	MMDT2227DW	MMDT3052DW
MMDT3904DW	MMDT3906DW	MMDT3946DW	MMDT4148DW	MMDT4401DW	

SOT553 PKG

MMDT2102	MMDT4002
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Remark: dimension and specification of each product is available upon request.

Transistor -- Major Products

SOT523 PKG					
S9014T	S9015T	S8550T	S8050T	SS8050T	MMBT3904T
BAT54T	MMBT5551T	MMBT5401T	BAV70T	BAV99T	2SC4617R
2SK3018	2SK3019	2N7002K	BC2301-2.3A	BC2301-2.8A	BC846BT
BC847BT	BC848BT	BC856BT	BC857BT	BC858T	MMBT3906T
SS8550T	MMBT2222A	MMUN2211	MMUN2212	DTC123	DTA123
DTA143	DTC124	DTC114EE	BAT54AT	BAT54ST	

SOT563 PKG				
MMDT3904V	MMDT3155	MMDT4001	MMDT0512	MMDT3154

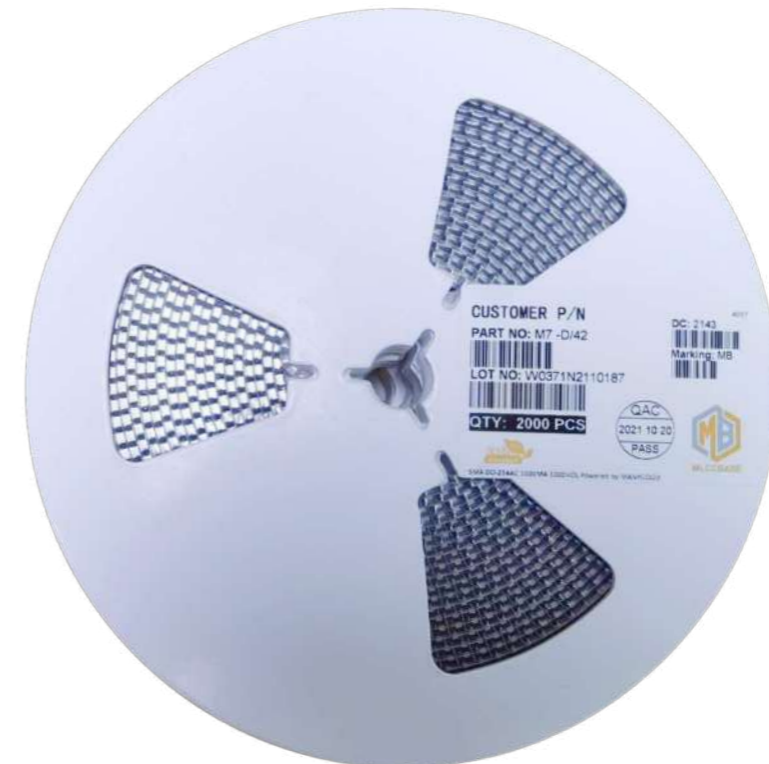
SOT23 PKG					
MMBT3904	S9014	S9015	BC846B	BC847B	C1815
C945	2SC1623	2SC2412	BC856B	BC857B	BC858B
A1015	S9013	S9012	S8050	S8550	SS8050
MMBT5551	MMBT5401	MMBT2907A	MMBT2222A	BAV70	BAV99
BAW56	MMBD7000	MMBD4148CC	MMBD4148CA	MMBD4148SE	1SS181
1SS226	BAT54	BAT54A	BAT54C	BAT54S	MMBTRC3356-3G
BAS21	BAS23	2SK3018	2SK3019	BC2301-2.3A	BC2301-2.8A
MMBT3906	SS8550	2N7002K	TL431	MMUN2211	MMUN2212
DTC123	DTA123	DTA143	DTC124	DTC114EE	BC3401
TL432	BC3407				

SOT23-3L/5L/6L					
BC2301-2.3A	BC2301-2.8A	2N7002K	BC3401	TL432	BC3407

SOT89 PKG					
SS8050	SS8550	D772-2A	D882-2A	78L05	2N5551
2N5401	2N3904	2N3906	D882-3A	TL432	

Product Catalog --Diodes

Diode & Bridge Rectifier



Diodes -- Major Products

SMA		SMA Schottky		SMB Schottky	
Part Number	Size(MIL)	Part Number	Size(MIL)	Part Number	Size(MIL)
M7	42	SS110	26	SS210	40
	46				
S2M	50	SS14	26	SS24	40
	60	SS16			
RS1D/RS1G	42	SS210	32	SS26	45
	46	SS24/34			
RS1M	42	SS26/36	35	SS310	45
	46	SS210/310			
RS2M	50	SS24/34	40	SS34	50
	60	SS26/36			
US1D/US1G	42	SS210/310	40	SS36	55
	46	SS24/34			
US1M	42	SS26/36	45	SS510	60
	46	SS310			
US2D/US2G	50	SS34	50	SS54	60
	60	SS36			
US2M	50	SS310	55	SS56	60
	60	SS34			
ES1D/ES1G	42	SS36	60	SS510	60
	46	SS54			
ES1J	42	SS56	60	SS510	60
	46	SS510			
ES2D/ES2G	50	SS54	60	SS56	60
	60	SS510			
ES2J	50	SS56	60	SS510	60
	60	SS510			

SMAF		
Part Number	Size(MIL)	
ES1JF	42	
	46	
ES2JF	50	
	60	
M7F	Electrophoresis	42
		46
	Die Singulation	42
		46
RS1MF	42	
	46	

Remark: dimension and specification of each product is available upon request.

Diodes -- Major Products

SMAF Schottky	
Part Number	Size(MIL)
SS110F	26
SS14F	
SS16F	32
SS210F	
SS24F/34F	35
SS26F/36F	
SS210F/310F	40
SS24F/34F	
SS26F/36F	45
SS210F/310F	
SS310F	50
SS34F	
SS36F	55
SS310F	
SS34F	60
SS36F	
SS54F	60
SS56F	
SS510F	60
SS510F	

SOD-123FL		
Part Number	Size(MIL)	
A7	Electrophoresis	42
		46
E1J	42	46
	46	
F7	42	46
	46	

SOD-123FL Schottky	
Part Number	Size(MIL)
K110	26
K14	
K16	32
K210/K310	
K24/34	35
K26/K36	
K210/K310	40
K24/34	
K26/K36	45
K210/K310	
K24/34	45
K26/K36	
K310	45
K34	
K36	45

ABS	
Part Number	Size(MIL)
ABS210	60
ABS6/8/10	46
ABS6/8/10	50

MBM	
Part Number	Size(MIL)
MB(6/8/10)M	42
	46
	50

Bridge Rectifiers -- Major Products



MBF (Metal Bridge Rectifier, Forward)

Part Number	Size(MIL)	
MB(6/8/10)F	Electrophoresis	42
		46
	Die Singulation	42
		46
	50	

Metal Bridge Rectifier, Shorted

Part Number	Size(MIL)	
MB(6/8/10)S	Electrophoresis	42
		46
	Die Singulation	42
		46
	50	

DBS

Part Number	Size(MIL)
DB107S	50
DB207S	60
DB307S	70

GBU

Part Number	Size(MIL)
GBU410/GBU610	70
GBU610/GBU810	84
GBU610/GBU810	88
GBU810	95
GBU810/GBU1010	100
GBU1010/GBU1510	110
GBU1010/GBU1510	120
GBU1510	130

GBP

Part Number	Size(MIL)
GBP210	50
GBP210/GBP310	60
GBP310/GBP410	70

Transient Voltage Suppressors

Type		Device Marking Code		Breakdown Voltage			Reverse Stand Off Voltage	Maximum Reverse Leakage at Vm		Maximum Peak Pulse Current	Maximum Clamping Voltage at Ippm	Package
UNI	BI	UNI	BI	VBR (Volts)			VWM	ID		IPPM	Vc	
				min.	max.	mA		V	uA			
							UNI	BI				
P4SMFJ5.0	P4SMFJ5.0C	5.0V	5.0C	6.40	7.82	10.0	5.0	800.0	1600.0	41.70	9.60	SMAF
P4SMFJ5.0A	P4SMFJ5.0CA	5.0A	5.0D	6.40	7.07	10.0	5.0	800.0	1600.0	43.50	9.20	
P4SMFJ6.0	P4SMFJ6.0C	6.0V	6.0C	6.67	8.15	10.0	6.0	800.0	1600.0	35.10	11.40	
P4SMFJ6.0A	P4SMFJ6.0CA	6.0A	6.0D	6.67	7.37	10.0	6.0	800.0	1600.0	38.80	10.30	
P4SMFJ6.5	P4SMFJ6.5C	6.5V	6.5C	7.22	8.82	10.0	6.5	500.0	1000.0	32.50	12.30	
P4SMFJ6.5A	P4SMFJ6.5CA	6.5A	6.5D	7.22	7.98	10.0	6.5	500.0	1000.0	35.70	11.20	
P4SMFJ7.0	P4SMFJ7.0C	7.0V	7.0C	7.78	9.51	10.0	7.0	200.0	400.0	30.10	13.30	
P4SMFJ7.0A	P4SMFJ7.0CA	7.0A	7.0D	7.78	8.60	10.0	7.0	200.0	400.0	33.30	12.00	
P4SMFJ7.5	P4SMFJ7.5C	7.5V	7.5C	8.33	10.20	1.0	7.5	100.0	200.0	28.00	14.30	
P4SMFJ7.5A	P4SMFJ7.5CA	7.5A	7.5C	8.33	9.21	1.0	7.5	100.0	200.0	31.00	12.90	
P4SMFJ8.0	P4SMFJ8.0C	8.0V	8.0D	8.89	10.90	1.0	8.0	50.0	100.0	26.70	15.00	
P4SMFJ8.0A	P4SMFJ8.0CA	8.0A	8.0C	8.89	9.83	1.0	8.0	50.0	100.0	29.40	13.60	
P4SMFJ8.5	P4SMFJ8.5C	8.5V	8.5D	9.44	11.50	1.0	8.5	10.0	20.0	25.20	15.90	
P4SMFJ8.5A	P4SMFJ8.5CA	8.5A	8.5C	9.44	10.40	1.0	8.5	10.0	20.0	27.90	14.40	
P4SMFJ9.0	P4SMFJ9.0C	9.0V	9.0D	10.00	12.20	1.0	9.0	5.0	10.0	23.70	16.90	
P4SMFJ9.0A	P4SMFJ9.0CA	9.0A	9.0C	10.00	11.10	1.0	9.0	5.0	10.0	26.00	15.40	
P4SMFJ10	P4SMFJ10C	10V	10D	11.10	13.60	1.0	10.0	5.0	10.0	21.30	18.80	
P4SMFJ10A	P4SMFJ10CA	10A	10C	11.10	12.30	1.0	10.0	5.0	10.0	23.50	17.00	
P4SMFJ11	P4SMFJ11C	11V	11D	12.20	14.90	1.0	11.0	5.0	5.0	19.90	20.10	
P4SMFJ11A	P4SMFJ11CA	11A	11C	12.20	13.50	1.0	11.0	5.0	5.0	22.00	18.20	
P4SMFJ12	P4SMFJ12C	12V	12D	13.30	16.30	1.0	12.0	5.0	5.0	18.20	22.00	
P4SMFJ12A	P4SMFJ12CA	12A	12C	13.30	14.70	1.0	12.0	5.0	5.0	20.10	19.90	
P4SMFJ13	P4SMFJ13C	13V	13D	14.40	17.60	1.0	13.0	5.0	5.0	16.80	23.80	
P4SMFJ13A	P4SMFJ13CA	13A	13C	14.40	15.90	1.0	13.0	5.0	5.0	18.60	21.50	
P4SMFJ14	P4SMFJ14C	14V	14D	15.60	19.10	1.0	14.0	5.0	5.0	15.50	25.80	
P4SMFJ14A	P4SMFJ14CA	14A	14C	15.60	17.20	1.0	14.0	5.0	5.0	17.20	23.20	
P4SMFJ15	P4SMFJ15C	15V	15C	16.70	20.40	1.0	15.0	5.0	5.0	14.90	26.90	
P4SMFJ15A	P4SMFJ15CA	15A	15D	16.70	18.50	1.0	15.0	5.0	5.0	16.40	24.40	
P4SMFJ16	P4SMFJ16C	16V	16C	17.80	21.80	1.0	16.0	5.0	5.0	13.90	28.80	
P4SMFJ16A	P4SMFJ16CA	16A	16D	17.80	19.70	1.0	16.0	5.0	5.0	15.40	26.00	
P4SMFJ17	P4SMFJ17C	17V	17C	18.90	24.40	1.0	17.0	5.0	5.0	13.10	30.50	
P4SMFJ17A	P4SMFJ17CA	17A	17D	18.90	20.90	1.0	17.0	5.0	5.0	14.50	27.60	
P4SMFJ18	P4SMFJ18C	18V	18C	20.00	24.40	1.0	18.0	5.0	5.0	12.40	32.20	
P4SMFJ18A	P4SMFJ18CA	18A	18D	20.00	22.10	1.0	18.0	5.0	5.0	13.70	29.20	
P4SMFJ20	P4SMFJ20C	20V	20C	22.20	27.10	1.0	20.0	5.0	5.0	11.20	35.80	
P4SMFJ20A	P4SMFJ20CA	20A	20D	22.20	24.50	1.0	20.0	5.0	5.0	12.30	32.40	
P4SMFJ22	P4SMFJ22C	22V	22C	24.40	29.80	1.0	22.0	5.0	5.0	10.20	39.40	
P4SMFJ22A	P4SMFJ22CA	22A	22D	24.40	26.90	1.0	22.0	5.0	5.0	11.30	35.50	
P4SMFJ24	P4SMFJ24C	24V	24C	26.70	32.60	1.0	24.0	5.0	5.0	9.30	43.00	
P4SMFJ24A	P4SMFJ24CA	24A	24D	26.70	29.50	1.0	24.0	5.0	5.0	10.30	38.90	
P4SMFJ26	P4SMFJ26C	26V	26C	28.90	35.30	1.0	26.0	5.0	5.0	8.60	46.60	
P4SMFJ26A	P4SMFJ26CA	26A	26D	28.90	31.90	1.0	26.0	5.0	5.0	9.50	42.10	
P4SMFJ28	P4SMFJ28C	28V	28C	31.10	38.00	1.0	28.0	5.0	5.0	8.00	50.00	
P4SMFJ28A	P4SMFJ28CA	28A	28D	31.10	34.40	1.0	28.0	5.0	5.0	8.80	45.40	
P4SMFJ30	P4SMFJ30C	30V	30C	33.30	40.70	1.0	30.0	5.0	5.0	7.50	53.50	
P4SMFJ30A	P4SMFJ30CA	30A	30D	33.30	36.80	1.0	30.0	5.0	5.0	8.30	48.40	
P4SMFJ33	P4SMFJ33C	33V	33C	36.70	44.90	1.0	33.0	5.0	5.0	6.80	59.00	



SOD-123FL Packaging Diodes

Type	Code	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
		V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
		V	V	A	uA	A	V	ns	
ES1ALN	EAN	50	1	25.0	5.0	1.0	0.95	35.0	SOD-123FL
ES1BLN	EBN	100	1	25.0	5.0	1.0	0.95	35.0	
ES1DLN	EDN	200	1	25.0	5.0	1.0	0.95	35.0	
ES1GLN	EGN	400	1	25.0	5.0	1.0	1.25	35.0	
ES1JLN	EJN	600	1	25.0	5.0	1.0	1.70	35.0	
ES1AL	EA	50	1	25.0	5.0	1.0	0.95	35.0	
ES1BL	EB	100	1	25.0	5.0	1.0	0.95	35.0	
ES1DL	ED	200	1	25.0	5.0	1.0	0.95	35.0	
ES1GL	EG	400	1	25.0	5.0	1.0	1.25	35.0	
ES1JL	EJ	600	1	25.0	5.0	1.0	1.70	35.0	
ES1ALU	EAU	50	1	25.0	5.0	1.0	0.95	35.0	
ES1BLU	EBU	100	1	25.0	5.0	1.0	0.95	35.0	
ES1DLU	EDU	200	1	25.0	5.0	1.0	0.95	35.0	
ES1GLU	EGU	400	1	25.0	5.0	1.0	1.25	35.0	
ES1JLU	EJU	600	1	25.0	5.0	1.0	1.70	35.0	
E15A	E15A	50	1.5	50.0	5.0	1.5	0.95	35.0	
E15B	E15B	100	1.5	50.0	5.0	1.5	0.95	35.0	
E15D	E15D	200	1.5	50.0	5.0	1.5	0.95	35.0	
E15G	E15G	400	1.5	50.0	5.0	1.5	1.25	35.0	
E15J	E15L	600	1.5	50.0	5.0	1.5	1.70	35.0	
US1ALN	UAN	50	1	25.0	5.0	1.0	1.00	50.0	
US1BLN	UBN	100	1	25.0	5.0	1.0	1.00	50.0	
US1DLN	UDN	200	1	25.0	5.0	1.0	1.00	50.0	
US1GLN	UGN	400	1	25.0	5.0	1.0	1.30	50.0	
US1JLN	UJN	600	1	25.0	5.0	1.0	1.70	75.0	
US1KLN	UKN	800	1	25.0	5.0	1.0	1.70	75.0	
US1MLN	UMN	1000	1	25.0	5.0	1.0	1.70	75.0	
US1AL	UA	50	1	25.0	5.0	1.0	1.00	50.0	
US1BL	UB	100	1	25.0	5.0	1.0	1.00	50.0	
US1DL	UD	200	1	25.0	5.0	1.0	1.00	50.0	
US1GL	UG	400	1	25.0	5.0	1.0	1.30	50.0	
US1JL	UJ	600	1	25.0	5.0	1.0	1.70	75.0	
US1KL	UK	800	1	25.0	5.0	1.0	1.70	75.0	
US1ML	UM	1000	1	25.0	5.0	1.0	1.70	75.0	
US1ALU	UAU	50	1	25.0	5.0	1.0	1.00	50.0	
US1BLU	UBU	100	1	25.0	5.0	1.0	1.00	50.0	
US1DLU	UDU	200	1	25.0	5.0	1.0	1.00	50.0	
US1GLU	UGU	400	1	25.0	5.0	1.0	1.30	50.0	
US1JLU	UJU	600	1	25.0	5.0	1.0	1.70	75.0	
US1KLU	UKU	800	1	25.0	5.0	1.0	1.70	75.0	
US1MLU	UMU	1000	1	25.0	5.0	1.0	1.70	75.0	
U15A	U15A	50	1.5	50.0	5.0	1.0	1.50	50.0	
U15B	U15B	100	1.5	50.0	5.0	1.0	1.50	50.0	
U15D	U15D	200	1.5	50.0	5.0	1.0	1.50	50.0	
U15G	U15G	400	1.5	50.0	5.0	1.0	1.30	50.0	
U15J	U15J	600	1.5	50.0	5.0	1.0	1.70	75.0	
U15K	U15K	800	1.5	50.0	5.0	1.0	1.70	75.0	
U15M	U15M	1000	1.5	50.0	5.0	1.0	1.70	75.0	



SOD-123FL Packaging Diodes

Type	Code	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25°C		Maximum Reverse Recovery Time	Package
		V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
		V	V	A	uA	A	V	ns	
F1N	F1N	50	1	25.0	5.0	1.0	1.30	150.0	SOD-123FL
F2N	F2N	100	1	25.0	5.0	1.0	1.30	150.0	
F3N	F3N	200	1	25.0	5.0	1.0	1.30	150.0	
F4N	F4N	400	1	25.0	5.0	1.0	1.30	150.0	
F5N	F5N	600	1	25.0	5.0	1.0	1.30	250.0	
F6N	F6N	800	1	25.0	5.0	1.0	1.30	500.0	
F7N	F7N	1000	1	25.0	5.0	1.0	1.30	500.0	
FFM101-M	F1/F1A	50	1	30.0	5.0	1.0	1.30	150.0	
FFM102-M	F2/F1B	100	1	30.0	5.0	1.0	1.30	150.0	
FFM103-M	F3/F1D	200	1	30.0	5.0	1.0	1.30	150.0	
FFM104-M	F4/F1G	400	1	30.0	5.0	1.0	1.30	150.0	
FFM105-M	F5/F1J	600	1	30.0	5.0	1.0	1.30	250.0	
FFM106-M	F6/F1K	800	1	30.0	5.0	1.0	1.30	500.0	
FFM107-M	F7/F1M	1000	1	30.0	5.0	1.0	1.30	500.0	
F1U	F1U	50	1	35.0	5.0	1.0	1.30	150.0	
F2U	F2U	100	1	35.0	5.0	1.5	1.30	150.0	
F3U	F3U	200	1	35.0	5.0	1.5	1.30	150.0	
F4U	F4U	400	1	35.0	5.0	1.5	1.30	150.0	
F5U	F5U	600	1	35.0	5.0	1.5	1.30	250.0	
F6U	F6U	800	1	35.0	5.0	1.5	1.30	500.0	
F7U	F7U	1000	1	35.0	5.0	1.0	1.30	500.0	
F151	F151	50	1.5	50.0	5.0	1.5	1.30	150.0	
F152	F152	100	1.5	50.0	5.0	1.5	1.30	150.0	
F153	F153	200	1.5	50.0	5.0	1.5	1.30	150.0	
F154	F154	400	1.5	50.0	5.0	1.5	1.30	150.0	
F155	F155	600	1.5	50.0	5.0	1.5	1.30	250.0	
F156	F156	800	1.5	50.0	5.0	1.5	1.30	500.0	
F157	F157	1000	1.5	50.0	5.0	1.5	1.30	500.0	
A1N	A1N	50	1	25.0	5.0	0.5	1.00	—	
A2N	A2N	100	1	25.0	5.0	0.5	1.00	—	
A3N	A3N	200	1	25.0	5.0	0.5	1.00	—	
A4N	A4N	400	1	25.0	5.0	0.5	1.00	—	
A5N	A5N	600	1	25.0	5.0	0.5	1.00	—	
A6N	A6N	800	1	25.0	5.0	0.5	1.00	—	
A7N	A7N	1000	1	25.0	5.0	0.5	1.00	—	
A1	A1	50	1	30.0	5.0	1.0	1.10	—	
A2	A2	100	1	30.0	5.0	1.0	1.10	—	
A3	A3	200	1	30.0	5.0	1.0	1.10	—	
A4	A4	400	1	30.0	5.0	1.0	1.10	—	
A5	A5	600	1	30.0	5.0	1.0	1.10	—	
A6	A6	800	1	30.0	5.0	1.0	1.10	—	
A7	A7	1000	1	30.0	5.0	1.0	1.10	—	
A1U	A1U	50	1	35.0	5.0	1.0	1.10	—	
A2U	A2U	100	1	35.0	5.0	1.0	1.10	—	
A3U	A3U	200	1	35.0	5.0	1.0	1.10	—	
A4U	A4U	400	1	35.0	5.0	1.0	1.10	—	
A5U	A5U	600	1	35.0	5.0	1.0	1.10	—	
A6U	A6U	800	1	35.0	5.0	1.0	1.10	—	



SOD-123FL Packaging Diodes

Type	Code	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
		V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
		V	V	A	uA	A	V	ns	
A7U	A7U	1000	1	35.0	5.0	1.0	1.30	—	SOD-123FL
A151	A151	50	1.5	50.0	5.0	1.5	1.30	—	
A152	A152	100	1.5	50.0	5.0	1.5	1.30	—	
A153	A153	200	1.5	50.0	5.0	1.5	1.30	—	
A154	A154	400	1.5	50.0	5.0	1.5	1.30	—	
A155	A155	600	1.5	50.0	5.0	1.5	1.30	—	
A156	A156	800	1.5	50.0	5.0	1.5	1.30	—	
A157	A157	1000	1.5	50.0	5.0	1.5	1.30	—	
DSS12	D12	20	1	30.0	100.0	1.0	1.30	—	
DSS13	D13	30	1	30.0	100.0	1.0	1.30	—	
DSS14	D14	40	1	30.0	100.0	1.0	1.30	—	
DSS15	D15	50	1	30.0	100.0	1.0	1.30	—	
DSS16	D16	60	1	30.0	100.0	1.0	1.30	—	
DSS18	D18	80	1	30.0	100.0	1.0	1.30	—	
DSS110	D110	100	1	30.0	100.0	1.0	1.30	—	
DSS115	D115	150	1	30.0	100.0	1.0	1.30	—	
DSS120	D120	200	1	30.0	100.0	1.0	1.30	—	
DSS125	D125	250	1	30.0	100.0	1.0	1.30	—	
DSS12U	D12U	20	1	30.0	100.0	1.0	1.30	—	
DSS13U	D13U	30	1	30.0	100.0	1.0	1.30	—	
DSS14U	D14U	40	1	30.0	100.0	1.0	1.30	—	
DSS15U	D15U	50	1.5	30.0	100.0	1.0	1.30	—	
DSS16U	D16U	60	1.5	30.0	100.0	1.0	1.30	—	
DSS18U	D18U	80	1.5	30.0	100.0	1.0	1.30	—	
DSS110U	D110U	100	1.5	30.0	100.0	1.0	1.30	—	
DSS115U	D115U	150	1.5	30.0	100.0	1.0	1.30	—	
DSS120U	D120U	200	1.5	30.0	100.0	1.0	1.30	—	
DSS125U	D125U	250	1.5	30.0	100.0	1.0	1.30	—	
DSS14L	D14L	40	1	30.0	500.0	1.0	1.00	—	
DSS16L	D16L	60	1	30.0	500.0	1.0	1.00	—	
DSS18L	D18L	80	1	30.0	500.0	1.0	1.00	—	
DSS110L	D110L	100	1	30.0	500.0	1.0	1.00	—	
DSS115L	D115L	150	1	30.0	500.0	1.0	1.00	—	
DSS120L	D120L	200	1	30.0	500.0	1.0	1.00	—	
DSS22	D22	20	2	50.0	100.0	2.0	1.00	—	
DSS23	D23	30	2	50.0	100.0	2.0	1.10	—	
DSS24	D24	40	2	50.0	100.0	2.0	1.10	—	
DSS25	D25	50	2	50.0	100.0	2.0	1.10	—	
DSS26	D26	60	2	50.0	100.0	2.0	1.10	—	
DSS28	D28	80	2	50.0	50.0	2.0	1.10	—	
DSS210	D210	100	2	50.0	50.0	2.0	1.10	—	
DSS215	D215	150	2	50.0	50.0	2.0	1.10	—	
DSS220	D220	200	2	50.0	50.0	2.0	1.10	—	
DSS225	D225	250	2	50.0	50.0	2.0	1.10	—	
DSS22U	D22U	20	2	60.0	100.0	2.0	1.10	—	
DSS23U	D23U	30	2	60.0	100.0	2.0	1.10	—	
DSS24U	D24U	40	2	60.0	100.0	2.0	1.10	—	
DSS25U	D25U	50	2	60.0	100.0	2.0	1.10	—	



SOD-123FL Packaging Diodes

Type	Code	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
		V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
		V	V	A	uA	A	V	ns	
DSS26U	D26U	60	2.0	60.0	100.0	2.0	0.67	—	SOD-123FL
DSS28U	D28U	80	2.0	60.0	50.0	2.0	0.80	—	
DSS210U	D210U	100	2.0	60.0	50.0	2.0	0.80	—	
DSS215U	D215U	150	2.0	60.0	50.0	2.0	0.90	—	
DSS220U	D220U	200	2.0	60.0	50.0	2.0	0.90	—	
DSS225U	D225U	250	2.0	60.0	50.0	2.0	0.92	—	
DSS24L	D24L	40	2.0	50.0	500.0	2.0	0.43	—	
DSS26L	D26L	60	2.0	50.0	500.0	2.0	0.50	—	
DSS28L	D28L	80	2.0	50.0	300.0	2.0	0.60	—	
DSS210L	D210L	100	2.0	50.0	300.0	2.0	0.60	—	
DSS215L	D215L	150	2.0	50.0	300.0	2.0	0.80	—	
DSS220L	L220L	200	2.0	50.0	300.0	2.0	0.80	—	
DSS32	D32	20	3.0	80.0	100.0	3.0	0.55	—	
DSS33	D33	30	3.0	80.0	100.0	3.0	0.55	—	
DSS34	D34	40	3.0	80.0	100.0	3.0	0.55	—	
DSS35	D35	50	3.0	80.0	100.0	3.0	0.70	—	
DSS36	D36	60	3.0	80.0	100.0	3.0	0.70	—	
DSS38	D38	80	3.0	80.0	50.0	3.0	0.85	—	
DSS310	D310	100	3.0	80.0	50.0	3.0	0.85	—	
DSS315	D315	150	2.0	80.0	50.0	3.0	0.92	—	
DSS320	D320	200	2.0	80.0	50.0	3.0	0.92	—	
DSS325	D325	250	2.0	80.0	50.0	3.0	0.95	—	

SOD-123FL Packaging Diodes



Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25°C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
G1A	50	1	30.0	5.0	1.0	1.1	—	SMAF
G1B	100	1	30.0	5.0	1.0	1.1	—	
G1D	200	1	30.0	5.0	1.0	1.1	—	
G1G	400	1	30.0	5.0	1.0	1.1	—	
G1J	600	1	30.0	5.0	1.0	1.1	—	
G1K	800	1	30.0	5.0	1.0	1.1	—	
G1M	1000	1	30.0	5.0	1.0	1.1	—	
G1AU	50	1	35.0	5.0	1.0	1.1	—	
G1BU	100	1	35.0	5.0	1.0	1.1	—	
G1DU	200	1	35.0	5.0	1.0	1.1	—	
G1GU	400	1	35.0	5.0	1.0	1.1	—	
G1JU	600	1	35.0	5.0	1.0	1.1	—	
G1KU	800	1	35.0	5.0	1.0	1.1	—	
G1MU	1000	1	35.0	5.0	1.0	1.1	—	
G2A	50	1	50.0	5.0	1.0	1.1	—	
G2B	100	1	50.0	5.0	1.0	1.1	—	
G2D	200	1	50.0	5.0	1.0	1.1	—	
G2G	400	1	50.0	5.0	1.0	1.1	—	
G2J	600	1	50.0	5.0	1.0	1.1	—	
G2K	800	1	50.0	5.0	1.0	1.1	—	
G2M	1000	1	50.0	5.0	1.0	1.1	—	
G2AU	50	1	60.0	5.0	1.0	1.1	—	
G2BU	100	1	60.0	5.0	1.0	1.1	—	
G2DU	200	1	60.0	5.0	1.0	1.1	—	
G2GU	400	1	60.0	5.0	1.0	1.1	—	
G2JU	600	1	60.0	5.0	1.0	1.1	—	
G2KU	800	1	60.0	5.0	1.0	1.1	—	
G2MU	1000	1	60.0	5.0	1.0	1.1	—	
S12	20	1	30.0	100.0	1.0	0.55	—	
S13	30	1	30.0	100.0	1.0	0.55	—	
S14	40	1	30.0	100.0	1.0	0.55	—	
S145	45	1	30.0	100.0	1.0	0.55	—	
S15	50	1	30.0	100.0	1.0	0.70	—	
S16	60	1	30.0	100.0	1.0	0.70	—	
S18	80	1	30.0	100.0	1.0	0.85	—	
S110	100	1	30.0	50.0	1.0	0.85	—	
S115	150	1	30.0	50.0	1.0	0.92	—	
S120	200	1	30.0	50.0	1.0	0.92	—	
S125	250	1	30.0	50.0	1.0	0.95	—	
S12U	20	1	40.0	100.0	1.0	0.50	—	
S13U	30	1	40.0	100.0	1.0	0.50	—	
S14U	40	1	40.0	100.0	1.0	0.50	—	
S145U	45	1	40.0	100.0	1.0	0.50	—	
S15U	50	1	40.0	100.0	1.0	0.67	—	
S16U	60	1	40.0	100.0	1.0	0.67	—	
S18U	80	1	40.0	50.0	1.0	0.82	—	
S110U	100	1	40.0	50.0	1.0	0.82	—	
S115U	150	1	40.0	50.0	1.0	0.90	—	

SMAF Packaging Diodes



Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
S120U	200	1	40.0	50.0	1.0	0.90	—	SMAF
S125U	250	1	40.0	50.0	1.0	0.92	—	
S14L	40	1	40.0	500.0	1.0	0.45	—	
S16L	60	1	40.0	500.0	1.0	0.55	—	
S18L	80	1	40.0	300.0	1.0	0.60	—	
S110L	100	1	40.0	300.0	1.0	0.60	—	
S115L	150	1	40.0	300.0	1.0	0.80	—	
S120L	200	1	40.0	300.0	1.0	0.80	—	
S22	20	2	50.0	100.0	2.0	0.55	—	
S23	30	2	50.0	100.0	2.0	0.55	—	
S24	40	2	50.0	100.0	2.0	0.55	—	
S245	45	2	50.0	100.0	2.0	0.55	—	
S25	50	2	50.0	100.0	2.0	0.70	—	
S26	60	2	50.0	100.0	2.0	0.70	—	
S28	80	2	50.0	50.0	2.0	0.85	—	
S210	100	2	50.0	50.0	2.0	0.85	—	
S215	150	2	50.0	50.0	2.0	0.92	—	
S220	200	2	50.0	50.0	2.0	0.92	—	
S225	250	2	50.0	50.0	2.0	0.95	—	
S22U	20	2	60.0	100.0	2.0	0.50	—	
S23U	30	2	60.0	100.0	2.0	0.50	—	
S24U	40	2	60.0	100.0	2.0	0.50	—	
S245U	45	2	60.0	100.0	2.0	0.50	—	
S25U	50	2	60.0	100.0	2.0	0.67	—	
S26U	60	2	60.0	100.0	2.0	0.67	—	
S28U	80	2	60.0	50.0	2.0	0.82	—	
S210U	100	2	60.0	50.0	2.0	0.82	—	
S215U	150	2	60.0	50.0	2.0	0.90	—	
S220U	200	2	60.0	50.0	2.0	0.90	—	
S225U	250	2	60.0	50.0	2.0	0.92	—	
S22T	20	2	80.0	100.0	2.0	0.50	—	
S23T	30	2	80.0	100.0	2.0	0.50	—	
S24T	40	2	80.0	100.0	2.0	0.50	—	
S245T	45	2	80.0	100.0	2.0	0.50	—	
S25T	50	2	80.0	100.0	2.0	0.67	—	
S26T	60	2	80.0	100.0	2.0	0.67	—	
S28T	80	2	80.0	50.0	2.0	0.82	—	
S210T	100	2	80.0	50.0	2.0	0.82	—	
S215T	150	2	80.0	50.0	2.0	0.90	—	
S220T	200	2	80.0	50.0	2.0	0.90	—	
S225T	250	2	80.0	50.0	2.0	0.92	—	
S24L	40	2	60.0	500.0	2.0	0.45	—	
S26L	60	2	60.0	500.0	2.0	0.55	—	
S28L	80	2	60.0	300.0	2.0	0.60	—	
S210L	100	2	60.0	300.0	2.0	0.60	—	
S215L	150	2	60.0	300.0	2.0	0.80	—	
S220L	200	2	60.0	300.0	2.0	0.80	—	
S32	20	3	60.0	100.0	3.0	0.55	—	



SMAF Packaging Diodes

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
S33	30	3	80.0	100.0	3.0	0.55	—	SMAF
S34	40	3	80.0	100.0	3.0	0.55	—	
S345	45	3	80.0	100.0	3.0	0.55	—	
S35	50	3	80.0	100.0	3.0	0.70	—	
S36	60	3	80.0	100.0	3.0	0.70	—	
S38	80	3	80.0	50.0	3.0	0.85	—	
S310	100	3	80.0	50.0	3.0	0.85	—	
S315	150	3	80.0	50.0	3.0	0.92	—	
S320	200	3	80.0	50.0	3.0	0.92	—	
S325	250	3	80.0	50.0	3.0	0.95	—	
S32U	20	3	90.0	100.0	3.0	0.50	—	
S33U	30	3	90.0	100.0	3.0	0.50	—	
S34U	40	3	90.0	100.0	3.0	0.50	—	
S345U	45	3	90.0	100.0	3.0	0.50	—	
S35U	50	3	90.0	100.0	3.0	0.67	—	
S36U	60	3	90.0	100.0	3.0	0.67	—	
S38U	80	3	90.0	50.0	3.0	0.82	—	
S310U	100	3	90.0	50.0	3.0	0.82	—	
S315U	150	3	90.0	50.0	3.0	0.90	—	
S320U	200	3	90.0	50.0	3.0	0.90	—	
S325U	250	3	90.0	50.0	3.0	0.92	—	
S34L	40	3	80.0	500.0	3.0	0.45	—	
S36L	60	3	80.0	500.0	3.0	0.55	—	
S38L	80	3	80.0	300.0	3.0	0.60	—	
S310L	100	3	80.0	300.0	3.0	0.60	—	
S315L	150	3	80.0	300.0	3.0	0.80	—	
S320L	200	3	80.0	300.0	3.0	0.80	—	
S52	20	5	100.0	100.0	5.0	0.55	—	
S53	30	5	100.0	100.0	5.0	0.55	—	
S54	40	5	100.0	100.0	5.0	0.55	—	
S545	45	5	100.0	100.0	5.0	0.55	—	
S55	50	5	100.0	100.0	5.0	0.70	—	
S56	60	5	100.0	100.0	5.0	0.70	—	
S58	80	5	100.0	50.0	5.0	0.85	—	
S510	100	5	100.0	50.0	5.0	0.85	—	
S515	150	5	100.0	50.0	5.0	0.92	—	
S520	200	5	100.0	50.0	5.0	0.92	—	
S525	250	5	100.0	50.0	5.0	0.95	—	
S52U	20	5	110.0	100.0	5.0	0.50	—	
S53U	30	5	110.0	100.0	5.0	0.50	—	
S54U	40	5	110.0	100.0	5.0	0.50	—	
S545U	45	5	110.0	100.0	5.0	0.50	—	
S55U	50	5	110.0	100.0	5.0	0.67	—	
S56U	60	5	110.0	100.0	5.0	0.67	—	
S58U	80	5	110.0	50.0	5.0	0.82	—	
S510U	100	5	110.0	50.0	5.0	0.82	—	
S515U	150	5	110.0	50.0	5.0	0.90	—	
S520U	200	5	110.0	50.0	5.0	0.90	—	



SMAF Packaging Diodes

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
S525U	250	5	110.0	50.0	5.0	0.92	—	SMAF
S52T	20	5	120.0	100.0	5.0	0.50	—	
S53T	30	5	120.0	100.0	5.0	0.50	—	
S54T	40	5	120.0	100.0	5.0	0.50	—	
S545T	45	5	120.0	100.0	5.0	0.50	—	
S55T	50	5	120.0	100.0	5.0	0.67	—	
S56T	60	5	120.0	100.0	5.0	0.67	—	
S58T	80	5	120.0	50.0	5.0	0.82	—	
S510T	100	5	120.0	50.0	5.0	0.82	—	
S515T	150	5	120.0	50.0	5.0	0.90	—	
S520T	200	5	120.0	50.0	5.0	0.90	—	
S525T	250	5	120.0	50.0	5.0	0.92	—	
S54L	40	5	120.0	500.0	5.0	0.45	—	
S56L	60	5	120.0	500.0	5.0	0.55	—	
S58L	80	5	120.0	300.0	5.0	0.60	—	
S510L	100	5	120.0	300.0	5.0	0.60	—	
S515L	150	5	120.0	300.0	5.0	0.80	—	
S520L	200	5	120.0	300.0	5.0	0.80	—	
E1AN	50	1	30.0	5.0	1.0	0.95	35.00	
E1BN	100	1	30.0	5.0	1.0	0.95	35.00	
E1DN	200	1	30.0	5.0	1.0	0.95	35.00	
E1GN	400	1	30.0	5.0	1.0	1.25	35.00	
E1JN	600	1	30.0	5.0	1.0	1.70	35.00	
E1A	50	1	35.0	5.0	1.0	0.95	35.00	
E1B	100	1	35.0	5.0	1.0	0.95	35.00	
E1D	200	1	35.0	5.0	1.0	0.95	35.00	
E1G	400	1	35.0	5.0	1.0	1.25	35.00	
B1J	600	1	35.0	5.0	1.0	1.70	35.00	
E2AN	50	2	50.0	5.0	2.0	0.95	35.00	
E2BN	100	2	50.0	5.0	2.0	0.95	35.00	
E2DN	200	2	50.0	5.0	2.0	0.95	35.00	
E2GN	400	2	50.0	5.0	2.0	1.25	35.00	
E2JN	600	2	50.0	5.0	2.0	1.70	35.00	
E2A	50	2	60.0	5.0	2.0	0.95	35.00	
E2B	100	2	60.0	5.0	2.0	0.95	35.00	
E2D	200	2	60.0	5.0	2.0	0.95	35.00	
E2G	400	2	60.0	5.0	2.0	1.25	35.00	
E2J	600	2	60.0	5.0	2.0	1.70	35.00	
U1A	50	1	30.0	5.0	1.0	1.00	50.00	
U1B	100	1	30.0	5.0	1.0	1.00	50.00	
U1D	200	1	30.0	5.0	1.0	1.00	50.00	
U1G	400	1	30.0	5.0	1.0	1.00	50.00	
U1J	600	1	30.0	5.0	1.0	1.70	75.00	
U1K	800	1	30.0	5.0	1.0	1.70	75.00	
U1M	1000	1	30.0	5.0	1.0	1.70	75.00	
U1AU	50	1	35.0	5.0	1.0	1.00	50.00	
U1BU	100	1	35.0	5.0	1.0	1.00	50.00	



SMAF Packaging Diodes

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=2591	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
U1DU	200	1.0	35.0	5.0	1.0	1.00	50.00	SMAF
U1GU	400	1.0	35.0	5.0	1.0	1.00	50.00	
U1JU	600	1.0	35.0	5.0	1.0	1.70	75.00	
U1KU	800	1.0	35.0	5.0	1.0	1.70	75.00	
U1MU	1000	1.0	35.0	5.0	1.0	1.70	75.00	
U2AN	50	2.0	50.0	5.0	2.0	1.00	50.00	
U2BN	100	2.0	50.0	5.0	2.0	1.00	50.00	
U2DN	200	2.0	50.0	5.0	2.0	1.00	50.00	
U2GN	400	2.0	50.0	5.0	2.0	1.30	50.00	
U2JN	600	2.0	50.0	5.0	2.0	1.50	75.00	
U2KN	800	2.0	50.0	5.0	2.0	1.70	75.00	
U2MN	1000	2.0	50.0	5.0	2.0	1.70	75.00	
U2A	50	2.0	60.0	5.0	2.0	1.00	50.00	
U2B	100	2.0	60.0	5.0	2.0	1.00	50.00	
U2D	200	2.0	60.0	5.0	2.0	1.00	50.00	
U2G	400	2.0	60.0	5.0	2.0	1.30	50.00	
U2J	600	2.0	60.0	5.0	2.0	1.50	75.00	
U2K	800	2.0	60.0	5.0	2.0	1.70	75.00	
U2M	1000	2.0	60.0	5.0	2.0	1.70	75.00	
R1A	50	1.0	30.0	5.0	1.0	1.30	150.00	
R1B	100	1.0	30.0	5.0	1.0	1.30	150.00	
R1D	200	1.0	30.0	5.0	1.0	1.30	150.00	
R1G	400	1.0	30.0	5.0	1.0	1.30	150.00	
R1J	600	1.0	30.0	5.0	1.0	1.30	250.00	
R1K	800	1.0	30.0	5.0	1.0	1.30	500.00	
R1M	1000	1.0	30.0	5.0	1.0	1.30	500.00	
R1AU	50	1.0	35.0	5.0	1.0	1.30	150.00	
R1BU	100	1.0	35.0	5.0	1.0	1.30	150.00	
R1DU	200	1.0	35.0	5.0	1.0	1.30	150.00	
R1GU	400	1.0	35.0	5.0	1.0	1.30	150.00	
R1JU	600	1.0	35.0	5.0	1.0	1.30	250.00	
R1KU	800	1.0	35.0	5.0	1.0	1.30	500.00	
R1MU	1000	1.0	35.0	5.0	1.0	1.30	500.00	
R2AN	50	2.0	50.0	5.0	2.0	1.30	150.00	
R2BN	100	2.0	50.0	5.0	2.0	1.30	150.00	
R2DN	200	2.0	50.0	5.0	2.0	1.30	150.00	
R2GN	400	2.0	50.0	5.0	2.0	1.30	150.00	
R2JN	600	2.0	50.0	5.0	2.0	1.30	250.00	
R2KN	800	2.0	50.0	5.0	2.0	1.30	500.00	
R2MN	1000	2.0	50.0	5.0	2.0	1.30	500.00	
R2A	50	2.0	60.0	5.0	2.0	1.30	150.00	
R2B	100	2.0	60.0	5.0	2.0	1.30	150.00	
R2D	200	2.0	60.0	5.0	2.0	1.30	150.00	
R2G	400	2.0	60.0	5.0	2.0	1.30	150.00	
R2J	600	2.0	60.0	5.0	2.0	1.30	250.00	
R2K	800	2.0	60.0	5.0	2.0	1.30	500.00	
R2M	1000	2.0	60.0	5.0	2.0	1.30	500.00	



SMA SMB

Surface Mount/General Purpose Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
GS1AN	50	1.0	25.0	5.0	1.0	1.10	—	DO-214AC/SMA
GS1BN	100	1.0	25.0	5.0	1.0	1.10	—	
GS1DN	200	1.0	25.0	5.0	1.0	1.10	—	
GS1GN	400	1.0	25.0	5.0	1.0	1.10	—	
GS1JN	600	1.0	25.0	5.0	1.0	1.10	—	
GS1KN	800	1.0	25.0	5.0	1.0	1.10	—	
GS1MN	1000	1.0	25.0	5.0	1.0	1.10	—	
M1	50	1.0	25.0	5.0	1.0	1.10	—	
M2	100	1.0	25.0	5.0	1.0	1.10	—	
M3	200	1.0	25.0	5.0	1.0	1.10	—	
M4	400	1.0	25.0	5.0	1.0	1.10	—	
M5	600	1.0	25.0	5.0	1.0	1.10	—	
M6	800	1.0	25.0	5.0	1.0	1.10	—	
M7	1000	1.0	25.0	5.0	1.0	1.10	—	
GS1A	50	1.0	30.0	5.0	1.0	1.10	—	
GS1B	100	1.0	30.0	5.0	1.0	1.10	—	
GS1D	200	1.0	30.0	5.0	1.0	1.10	—	
GS1G	400	1.0	30.0	5.0	1.0	1.10	—	
GS1J	600	1.0	30.0	5.0	1.0	1.10	—	
GS1K	800	1.0	30.0	5.0	1.0	1.10	—	
GS1M	1000	1.0	30.0	5.0	1.0	1.10	—	
GS1AU	50	1.0	35.0	5.0	1.0	1.10	—	
GS1BU	100	1.0	35.0	5.0	1.0	1.10	—	
GS1DU	200	1.0	35.0	5.0	1.0	1.10	—	
GS1GU	400	1.0	35.0	5.0	1.0	1.10	—	
GS1JU	600	1.0	35.0	5.0	1.0	1.10	—	
GS1KU	800	1.0	35.0	5.0	1.0	1.10	—	
GS1MU	1000	1.0	35.0	5.0	1.0	1.10	—	
GS2AN	50	2.0	50.0	5.0	2.0	1.10	—	
GS2BN	100	2.0	50.0	5.0	2.0	1.10	—	
GS2DN	200	2.0	50.0	5.0	2.0	1.10	—	
GS2GN	400	2.0	50.0	5.0	2.0	1.10	—	
GS2JN	600	2.0	50.0	5.0	2.0	1.10	—	
GS2KN	800	2.0	50.0	5.0	2.0	1.10	—	
GS2MN	1000	2.0	50.0	5.0	2.0	1.10	—	
GS2A	50	2.0	60.0	5.0	2.0	1.10	—	
GS2B	100	2.0	60.0	5.0	2.0	1.10	—	
GS2D	200	2.0	60.0	5.0	2.0	1.10	—	
GS2G	400	2.0	60.0	5.0	2.0	1.10	—	
GS2J	600	2.0	60.0	5.0	2.0	1.10	—	
GS2K	800	2.0	60.0	5.0	2.0	1.10	—	
GS2M	1000	2.0	60.0	5.0	2.0	1.10	—	
S1A	50	1.0	30.0	5.0	1.0	1.10	—	DO-214AA/ SMB
S1B	100	1.0	30.0	5.0	1.0	1.10	—	
S1D	200	1.0	30.0	5.0	1.0	1.10	—	
S1G	400	1.0	30.0	5.0	1.0	1.10	—	
S1J	600	1.0	30.0	5.0	1.0	1.10	—	
S1K	800	1.0	30.0	5.0	1.0	1.10	—	



SMA SMB

Surface Mount/General Purpose Rectifiers

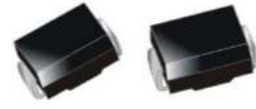
Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package	
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}		
	V	V	A	uA	A	V	ns		
S1M	1000	1.0	30.0	5.0	1.0	1.10	—	DO-214AA/ SMB	
S1AU	50	1.0	35.0	5.0	1.0	1.10	—		
S1BU	100	1.0	35.0	5.0	1.0	1.10	—		
S1DU	200	1.0	35.0	5.0	1.0	1.10	—		
S1GU	400	1.0	35.0	5.0	1.0	1.10	—		
S1JU	600	1.0	35.0	5.0	1.0	1.10	—		
S1KU	800	1.0	35.0	5.0	1.0	1.10	—		
S1MU	1000	1.0	35.0	5.0	1.0	1.10	—		
S2AN	50	2.0	50.0	5.0	2.0	1.10	—		
S2BN	100	2.0	50.0	5.0	2.0	1.10	—		
S2DN	200	2.0	50.0	5.0	2.0	1.10	—		
S2GN	400	2.0	50.0	5.0	2.0	1.10	—		
S2JN	600	2.0	50.0	5.0	2.0	1.10	—		
S2KN	800	2.0	50.0	5.0	2.0	1.10	—		
S2MN	1000	2.0	50.0	5.0	2.0	1.10	—		
S2A	50	2.0	60.0	5.0	2.0	1.10	—		
S2B	100	2.0	60.0	5.0	2.0	1.10	—		
S2D	200	2.0	60.0	5.0	2.0	1.10	—		
S2G	400	2.0	60.0	5.0	2.0	1.10	—		
S2J	600	2.0	60.0	5.0	2.0	1.10	—		
S2K	800	2.0	60.0	5.0	2.0	1.10	—		
S2M	1000	2.0	60.0	5.0	2.0	1.10	—		
S3A	50	3.0	80.0	5.0	3.0	1.10	—		
S3B	100	3.0	80.0	5.0	3.0	1.10	—		
S3D	200	3.0	80.0	5.0	3.0	1.10	—		
S3G	400	3.0	80.0	5.0	3.0	1.10	—		
S3J	600	3.0	80.0	5.0	3.0	1.10	—		
S3K	800	3.0	80.0	5.0	3.0	1.10	—		
S3M	1000	3.0	80.0	5.0	3.0	1.10	—		
RS1A	50	1.0	30.0	5.0	1.0	1.30	150.00		DO-214AC/ SMA
RS1B	100	1.0	30.0	5.0	1.0	1.30	150.00		
RS1D	200	1.0	30.0	5.0	1.0	1.30	150.00		
RS1G	400	1.0	30.0	5.0	1.0	1.30	150.00		
RS1J	600	1.0	30.0	5.0	1.0	1.30	250.00		
RS1K	800	1.0	30.0	5.0	1.0	1.30	500.00		
RS1M	1000	1.0	30.0	5.0	1.0	1.30	500.00		
RS1AU	50	1.0	35.0	5.0	1.0	1.30	150.00		
RS1BU	100	1.0	35.0	5.0	1.0	1.30	150.00		
RS1DU	200	1.0	35.0	5.0	1.0	1.30	150.00		
RS1GU	400	1.0	35.0	5.0	1.0	1.30	150.00		
RS1JU	600	1.0	35.0	5.0	1.0	1.30	250.00		
RS1KU	800	1.0	35.0	5.0	1.0	1.30	500.00		
RS1MU	1000	1.0	35.0	5.0	1.0	1.30	500.00		
RS2AN	50	2.0	50.0	5.0	2.0	1.30	150.00		
RS2BN	100	2.0	50.0	5.0	2.0	1.30	150.00		
RS2DN	200	2.0	50.0	5.0	2.0	1.30	150.00		
RS2GN	400	2.0	50.0	5.0	2.0	1.30	150.00		
RS2JN	600	2.0	50.0	5.0	2.0	1.30	250.00		



SMA SMB

Surface Mount/General Purpose Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25°C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package	
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}		
	V	V	A	uA	A	V	ns		
RS2KN	800	2.0	50.0	5.0	2.0	1.30	500.00	DO-214AC/ SMA	
RS2MN	1000	2.0	50.0	5.0	2.0	1.30	500.00		
RS2A	50	2.0	60.0	5.0	2.0	1.30	150.00		
RS2B	100	2.0	60.0	5.0	2.0	1.30	150.00		
RS2D	200	2.0	60.0	5.0	2.0	1.30	150.00		
RS2G	400	2.0	60.0	5.0	2.0	1.30	150.00		
RS2J	600	2.0	60.0	5.0	2.0	1.30	250.00		
RS2K	800	2.0	60.0	5.0	2.0	1.30	500.00		
RS2M	1000	2.0	60.0	5.0	2.0	1.30	500.00		
FR1A	50	1.0	30.0	5.0	1.0	1.30	150.00		DO-214AA /SMB
FR1B	100	1.0	30.0	5.0	1.0	1.30	150.00		
FR1D	200	1.0	30.0	5.0	1.0	1.30	150.00		
FR1G	400	1.0	30.0	5.0	1.0	1.30	150.00		
FR1J	600	1.0	30.0	5.0	1.0	1.30	250.00		
FR1K	800	1.0	30.0	5.0	1.0	1.30	500.00		
FR1M	1000	1.0	30.0	5.0	1.0	1.30	500.00		
FR1AU	50	1.0	35.0	5.0	1.0	1.30	150.00		
FR1BU	100	1.0	35.0	5.0	1.0	1.30	150.00		
FR1DU	200	1.0	35.0	5.0	1.0	1.30	150.00		
FR1GU	400	1.0	35.0	5.0	1.0	1.30	150.00		
FR1JU	600	1.0	35.0	5.0	1.0	1.30	250.00		
FR1KU	800	1.0	35.0	5.0	1.0	1.30	500.00		
FR1MU	1000	1.0	35.0	5.0	1.0	1.30	500.00		
FR2AN	50	2.0	50.0	5.0	2.0	1.30	150.00		
FR2BN	100	2.0	50.0	5.0	2.0	1.30	150.00		
FR2DN	200	2.0	50.0	5.0	2.0	1.30	150.00		
FR2GN	400	2.0	50.0	5.0	2.0	1.30	150.00		
FR2JN	600	2.0	50.0	5.0	2.0	1.30	250.00		
FR2KN	800	2.0	50.0	5.0	2.0	1.30	500.00		
FR2MN	1000	2.0	60.0	5.0	2.0	1.30	500.00		
FR2A	50	2.0	60.0	5.0	2.0	1.30	150.00		
FR2B	100	2.0	60.0	5.0	2.0	1.30	150.00		
FR2D	200	2.0	60.0	5.0	2.0	1.30	150.00		
FR2G	400	2.0	60.0	5.0	2.0	1.30	150.00		
FR2J	600	2.0	60.0	5.0	2.0	1.30	250.00		
FR2K	800	2.0	60.0	5.0	2.0	1.30	500.00		
FR2M	1000	2.0	60.0	5.0	2.0	1.30	500.00		
FR3A	50	3.0	80.0	5.0	3.0	1.30	150.00		
FR3B	100	3.0	80.0	5.0	3.0	1.30	150.00		
FR3D	200	3.0	80.0	5.0	3.0	1.30	150.00		
FR3G	400	3.0	80.0	5.0	3.0	1.30	150.00		
FR3J	600	3.0	80.0	5.0	3.0	1.30	250.00		
FR3K	800	3.0	80.0	5.0	3.0	1.30	500.00		
FR3M	1000	3.0	80.0	5.0	3.0	1.30	500.00		
US1A	50	1.0	30.0	5.0	1.0	1.00	50.00	DO-214AC/ SMA	
US1B	100	1.0	30.0	5.0	1.0	1.00	50.00		
US1D	200	1.0	30.0	5.0	1.0	1.00	50.00		
US1G	400	1.0	30.0	5.0	1.0	1.30	50.00		



SMA SMB

Surface Mount/General Purpose Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package	
	V _{RM}	I _o	I _{PSM}	I _r	I _F	V _{FM}	T _{rr}		
	V	V	A	uA	A	V	ns		
US1J	600	1.0	30.0	5.0	1.0	1.70	75.00	DO-214AC/ SMA	
US1K	800	1.0	30.0	5.0	1.0	1.70	75.00		
US1M	1000	1.0	30.0	5.0	1.0	1.70	75.00		
US2AN	50	2.0	50.0	5.0	2.0	1.00	50.00		
US2BN	100	2.0	50.0	5.0	2.0	1.00	50.00		
US2DN	200	2.0	50.0	5.0	2.0	1.00	50.00		
US2GN	400	2.0	50.0	5.0	2.0	1.30	50.00		
US2JN	600	2.0	50.0	5.0	2.0	1.70	75.00		
US2KN	800	2.0	50.0	5.0	2.0	1.70	75.00		
US2MN	1000	2.0	60.0	5.0	2.0	1.70	75.00		
US2A	50	2.0	60.0	5.0	2.0	1.00	50.00		
US2B	100	2.0	60.0	5.0	2.0	1.00	50.00		
US2D	200	2.0	60.0	5.0	2.0	1.00	50.00		
US2G	400	2.0	60.0	5.0	2.0	1.30	50.00		
US2J	600	2.0	60.0	5.0	2.0	1.70	75.00		
US2K	800	2.0	60.0	5.0	2.0	1.70	75.00		
US2M	1000	2.0	60.0	5.0	2.0	1.70	75.00		
UF1A	50	1.0	30.0	5.0	1.0	1.00	50.00		DO-214AA/ SMB
UF1B	100	1.0	30.0	5.0	1.0	1.00	50.00		
UF1D	200	1.0	30.0	5.0	1.0	1.00	50.00		
UF1G	400	1.0	30.0	5.0	1.0	1.30	50.00		
UF1J	600	1.0	30.0	5.0	1.0	1.70	75.00		
UF1K	800	1.0	30.0	5.0	1.0	1.70	75.00		
UF1M	1000	1.0	30.0	5.0	1.0	1.70	75.00		
UF1AU	50	1.0	35.0	5.0	1.0	1.00	50.00		
UF1BU	100	1.0	35.0	5.0	1.0	1.00	50.00		
UF1DU	200	1.0	35.0	5.0	1.0	1.00	50.00		
UF1GU	400	1.0	35.0	5.0	1.0	1.30	50.00		
UF1JU	600	1.0	35.0	5.0	1.0	1.70	75.00		
UF1KU	800	1.0	35.0	5.0	1.0	1.70	75.00		
UF1MU	1000	1.0	35.0	5.0	1.0	1.70	75.00		
UF2AN	50	2.0	50.0	5.0	2.0	1.00	50.00		
UF2BN	100	2.0	50.0	5.0	2.0	1.00	50.00		
UF2DN	200	2.0	50.0	5.0	2.0	1.00	50.00		
UF2GN	400	2.0	50.0	5.0	2.0	1.30	50.00		
UF2JN	600	2.0	50.0	5.0	2.0	1.70	75.00		
UF2KN	800	2.0	50.0	5.0	2.0	1.70	75.00		
UF2MN	1000	2.0	60.0	5.0	2.0	1.70	75.00		
UF2A	50	2.0	60.0	5.0	2.0	1.00	50.00		
UF2B	100	2.0	60.0	5.0	2.0	1.00	50.00		
UF2D	200	2.0	60.0	5.0	2.0	1.00	50.00		
UF2G	400	2.0	60.0	5.0	2.0	1.30	50.00		
UF2J	600	2.0	60.0	5.0	2.0	1.70	75.00		
UF2K	800	2.0	60.0	5.0	2.0	1.70	75.00		
UF2M	1000	2.0	60.0	5.0	2.0	1.70	75.00		
UF3A	50	3.0	80.0	5.0	3.0	1.00	50.00		
UF3B	100	3.0	80.0	5.0	3.0	1.00	50.00		
UF3D	200	3.0	80.0	5.0	3.0	1.00	50.00		



SMA SMB

Surface Mount/General Purpose Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _r	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
UF3G	400	3.0	80.0	5.0	3.0	1.30	50.00	DO-214AA/ SMB
UF3J	600	3.0	80.0	5.0	3.0	1.50	75.00	
UF3K	800	3.0	80.0	5.0	3.0	1.70	75.00	
UF3M	1000	3.0	80.0	5.0	3.0	1.70	75.00	
ES1AN	50	1.0	30.0	5.0	1.0	0.95	35.00	DO-214AC/ SMA
ES1BN	100	1.0	30.0	5.0	1.0	0.95	35.00	
ES1CN	150	1.0	30.0	5.0	1.0	0.95	35.00	
ES1DN	200	1.0	30.0	5.0	1.0	0.95	35.00	
ES1EN	300	1.0	30.0	5.0	1.0	1.25	35.00	
ES1GN	400	1.0	30.0	5.0	1.0	1.25	35.00	
ES1JN	600	1.0	30.0	5.0	1.0	1.70	35.00	
ES1A	50	1.0	35.0	5.0	1.0	0.95	35.00	
ES1B	100	1.0	35.0	5.0	1.0	0.95	35.00	
ES1C	150	1.0	35.0	5.0	1.0	0.95	35.00	
ES1D	200	1.0	35.0	5.0	1.0	0.95	35.00	
ES1E	300	1.0	35.0	5.0	1.0	1.25	35.00	
ES1G	400	1.0	35.0	5.0	1.0	1.25	35.00	
ES1J	600	1.0	35.0	5.0	1.0	1.70	35.00	
ES2AN	50	2.0	50.0	5.0	2.0	0.95	35.00	
ES2BN	100	2.0	50.0	5.0	2.0	0.95	35.00	
ES2CN	150	2.0	50.0	5.0	2.0	0.95	35.00	
ES2DN	200	2.0	50.0	5.0	2.0	0.95	35.00	
ES2EN	300	2.0	50.0	5.0	2.0	1.25	35.00	
ES2GN	400	2.0	50.0	5.0	2.0	1.25	35.00	
ES2JN	600	2.0	50.0	5.0	2.0	1.70	35.00	
ES2A	50	2.0	60.0	5.0	2.0	0.95	35.00	
ES2B	100	2.0	60.0	5.0	2.0	0.95	35.00	
ES2C	150	2.0	60.0	5.0	2.0	0.95	35.00	
ES2D	200	2.0	60.0	5.0	2.0	0.95	35.00	
ES2E	300	2.0	60.0	5.0	2.0	1.25	35.00	
ES2G	400	2.0	60.0	5.0	2.0	1.25	35.00	
ES2J	600	2.0	60.0	5.0	2.0	1.70	35.00	
ER1AN	50	1.0	30.0	5.0	1.0	0.95	35.00	DO-214AA/ SMB
ER1BN	100	1.0	30.0	5.0	1.0	0.95	35.00	
ER1CN	150	1.0	30.0	5.0	1.0	0.95	35.00	
ER1DN	200	1.0	30.0	5.0	1.0	0.95	35.00	
ER1EN	300	1.0	30.0	5.0	1.0	1.25	35.00	
ER1GN	400	1.0	30.0	5.0	1.0	1.25	35.00	
ER1JN	600	1.0	30.0	5.0	1.0	1.70	35.00	
ER1A	50	1.0	35.0	5.0	1.0	0.95	35.00	
ER1B	100	1.0	35.0	5.0	1.0	0.95	35.00	
ER1C	150	1.0	35.0	5.0	1.0	0.95	35.00	
ER1D	200	1.0	35.0	5.0	1.0	0.95	35.00	
ER1E	300	1.0	35.0	5.0	1.0	1.25	35.00	
ER1G	400	1.0	35.0	5.0	1.0	1.25	35.00	
ER1J	600	1.0	35.0	5.0	1.0	1.70	35.00	
ER2AN	50	2.0	50.0	5.0	2.0	0.95	35.00	
ER2BN	100	2.0	50.0	5.0	2.0	0.95	35.00	



Surface Mount/General Purpose Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
ER2CN	150	2.0	50.0	5.0	2.0	0.95	35.00	DO-214AA/SMB
ER2DN	200	2.0	50.0	5.0	2.0	0.95	35.00	
ER2EN	300	2.0	50.0	5.0	2.0	1.25	35.00	
ER2GN	400	2.0	50.0	5.0	2.0	1.25	35.00	
ER2JN	600	2.0	50.0	5.0	2.0	1.70	35.00	
ER2A	50	2.0	60.0	5.0	2.0	0.95	35.00	
ER2B	100	2.0	60.0	5.0	2.0	0.95	35.00	
ER2C	150	2.0	60.0	5.0	2.0	0.95	35.00	
ER2D	200	2.0	60.0	5.0	2.0	0.95	35.00	
ER2E	300	2.0	60.0	5.0	2.0	1.25	35.00	
ER2G	400	2.0	60.0	5.0	2.0	1.25	35.00	
ER2J	600	2.0	60.0	5.0	2.0	1.70	35.00	
ER3A	50	3.0	80.0	5.0	3.0	0.95	35.00	
ER3B	100	3.0	80.0	5.0	3.0	0.95	35.00	
ER3C	150	3.0	80.0	5.0	3.0	0.95	35.00	
ER3D	200	3.0	80.0	5.0	3.0	0.95	35.00	
ER3E	300	3.0	80.0	5.0	3.0	1.25	35.00	
ER3G	400	3.0	80.0	5.0	3.0	1.25	35.00	
ER3J	600	3.0	80.0	5.0	3.0	1.70	35.00	



Surface Mount/Schottky Barrier Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _O	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
SS12	20	1.0	30.0	100.0	1.0	0.55	—	DO-214AC/SMA
SS13	30	1.0	30.0	100.0	1.0	0.55	—	
SS14	40	1.0	30.0	100.0	1.0	0.55	—	
SS145	45	1.0	30.0	100.0	1.0	0.55	—	
SS15	50	1.0	30.0	100.0	1.0	0.70	—	
SS16	60	1.0	30.0	100.0	1.0	0.70	—	
SS18	80	1.0	30.0	50.0	1.0	0.85	—	
SS110	100	1.0	30.0	50.0	1.0	0.85	—	
SS115	150	1.0	30.0	50.0	1.0	0.92	—	
SS120	200	1.0	30.0	50.0	1.0	0.92	—	
SS125	250	1.0	30.0	50.0	1.0	0.95	—	
SS12U	20	1.0	40.0	100.0	1.0	0.50	—	
SS13U	30	1.0	40.0	100.0	1.0	0.50	—	
SS14U	40	1.0	40.0	100.0	1.0	0.50	—	
SS145U	45	1.0	40.0	100.0	1.0	0.50	—	
SS15U	50	1.0	40.0	100.0	1.0	0.67	—	
SS16U	60	1.0	4.0	100.0	1.0	0.67	—	
SS18U	80	1.0	40.0	50.0	1.0	0.82	—	
SS110U	100	1.0	40.0	50.0	1.0	0.82	—	
SS115U	150	1.0	40.0	50.0	1.0	0.90	—	
SS120U	200	1.0	40.0	50.0	1.0	0.90	—	
SS125U	250	1.0	40.0	50.0	1.0	0.92	—	
SS14L	40	1.0	30.0	500.0	1.0	0.45	—	
SS16L	60	1.0	30.0	500.0	1.0	0.55	—	
SS18L	80	1.0	30.0	300.0	1.0	0.60	—	
SS110L	100	1.0	30.0	300.0	1.0	0.60	—	
SS115L	150	1.0	30.0	300.0	1.0	0.80	—	
SS120L	200	1.0	30.0	300.0	1.0	0.80	—	
SS22	20	2.0	50.0	100.0	2.0	0.55	—	
SS23	30	2.0	50.0	100.0	2.0	0.55	—	
SS24	40	2.0	50.0	100.0	2.0	0.55	—	
SS245	45	2.0	50.0	100.0	2.0	0.55	—	
SS25	50	2.0	50.0	100.0	2.0	0.70	—	
SS26	60	2.0	50.0	100.0	2.0	0.70	—	
SS28	80	2.0	50.0	50.0	2.0	0.85	—	
SS210	100	2.0	50.0	50.0	2.0	0.85	—	
SS215	150	2.0	50.0	50.0	2.0	0.92	—	
SS220	200	2.0	50.0	50.0	2.0	0.92	—	
SS225	250	2.0	50.0	50.0	2.0	0.95	—	
SS22U	20	2.0	60.0	100.0	2.0	0.50	—	
SS23U	30	2.0	60.0	100.0	2.0	0.50	—	
SS24U	40	2.0	60.0	100.0	2.0	0.50	—	
SS245U	45	2.0	60.0	100.0	2.0	0.50	—	
SS25U	50	2.0	60.0	100.0	2.0	0.67	—	
SS26U	60	2.0	60.0	100.0	2.0	0.67	—	
SS28U	80	2.0	60.0	50.0	2.0	0.82	—	
SS210U	100	2.0	60.0	50.0	2.0	0.82	—	
SS215U	150	2.0	60.0	50.0	2.0	0.90	—	



Surface Mount/Schottky Barrier Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
SS220U	200	2.0	60.0	50.0	2.0	0.90	—	DO-214AC/ SMA
SS225U	250	2.0	60.0	50.0	2.0	0.92	—	
SS24L	40	2.0	50.0	500.0	2.0	0.45	—	
SS26L	60	2.0	50.0	500.0	2.0	0.55	—	
SS28L	80	2.0	50.0	300.0	2.0	0.60	—	
SS210L	100	2.0	50.0	300.0	2.0	0.60	—	
SS215L	150	2.0	50.0	300.0	2.0	0.80	—	
SS220L	200	2.0	50.0	300.0	2.0	0.80	—	
SS32	20	3.0	80.0	100.0	3.0	0.55	—	
SS33	30	3.0	80.0	100.0	3.0	0.55	—	
SS34	40	3.0	80.0	100.0	3.0	0.55	—	
SS345	45	3.0	80.0	100.0	3.0	0.55	—	
SS35	50	3.0	80.0	100.0	3.0	0.70	—	
SS36	60	3.0	80.0	100.0	3.0	0.70	—	
SS38	80	3.0	80.0	50.0	3.0	0.85	—	
SS310	100	3.0	80.0	50.0	3.0	0.85	—	
SS315	150	3.0	80.0	50.0	3.0	0.92	—	
SS320	200	3.0	80.0	50.0	3.0	0.92	—	
SS325	250	3.0	80.0	50.0	3.0	0.95	—	
SS32U	20	3.0	90.0	100.0	3.0	0.50	—	
SS33U	30	3.0	90.0	100.0	3.0	0.50	—	
SS34U	40	3.0	90.0	100.0	3.0	0.50	—	
SS345U	45	3.0	90.0	100.0	3.0	0.50	—	
SS35U	50	3.0	90.0	100.0	3.0	0.67	—	
SS36U	60	3.0	90.0	100.0	3.0	0.67	—	
SS38U	80	3.0	90.0	50.0	3.0	0.82	—	
SS310U	100	3.0	90.0	50.0	3.0	0.82	—	
SS315U	150	3.0	90.0	50.0	3.0	0.90	—	
SS320U	200	3.0	90.0	50.0	3.0	0.90	—	
SS325U	250	3.0	90.0	50.0	3.0	0.92	—	
SS34L	40	3.0	80.0	500.0	3.0	0.45	—	
SS36L	60	3.0	80.0	500.0	3.0	0.55	—	
SS38L	80	3.0	80.0	300.0	3.0	0.60	—	
SS310L	100	3.0	80.0	300.0	3.0	0.60	—	
SS315L	150	3.0	80.0	300.0	3.0	0.80	—	
SS320L	200	3.0	80.0	300.0	3.0	0.80	—	
SS52	20	5.0	100.0	100.0	5.0	0.55	—	
SS53	30	5.0	100.0	100.0	5.0	0.55	—	
SS54	40	5.0	100.0	100.0	5.0	0.55	—	
SS545	45	5.0	100.0	100.0	5.0	0.55	—	
SS55	50	5.0	100.0	100.0	5.0	0.70	—	
SS56	60	5.0	100.0	100.0	5.0	0.70	—	
SS58	80	5.0	100.0	50.0	5.0	0.85	—	
SS510	100	5.0	100.0	50.0	5.0	0.85	—	
SS550	150	5.0	100.0	50.0	5.0	0.92	—	
SS520	200	5.0	100.0	50.0	5.0	0.92	—	
SS525	250	5.0	100.0	50.0	5.0	0.95	—	
SS52U	20	5.0	110.0	100.0	5.0	0.50	—	



SMA SMB

Surface Mount/Schottky Barrier Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package	
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}		
	V	V	A	uA	A	V	ns		
SS53U	30	5.0	110.0	100.0	5.0	0.50	—	DO-214AC/ SMA	
SS54U	40	5.0	110.0	100.0	5.0	0.50	—		
SS545U	45	5.0	110.0	100.0	5.0	0.50	—		
SS55U	50	5.0	110.0	100.0	5.0	0.67	—		
SS56U	60	5.0	110.0	100.0	5.0	0.67	—		
SS58U	80	5.0	110.0	50.0	5.0	0.82	—		
SS510U	100	5.0	110.0	50.0	5.0	0.82	—		
SS550U	150	5.0	110.0	50.0	5.0	0.90	—		
SS520U	200	5.0	110.0	50.0	5.0	0.90	—		
SS525U	250	5.0	110.0	50.0	5.0	0.92	—		
SK12	20	1.0	30.0	100.0	1.0	0.55	—		DO-214AA/ SMB
SK13	30	1.0	30.0	100.0	1.0	0.55	—		
SK14	40	1.0	30.0	100.0	1.0	0.55	—		
SK145	45	1.0	30.0	100.0	1.0	0.55	—		
SK15	50	1.0	30.0	100.0	1.0	0.70	—		
SK16	60	1.0	30.0	100.0	1.0	0.70	—		
SK18	80	1.0	30.0	50.0	1.0	0.85	—		
SK110	100	1.0	30.0	50.0	1.0	0.85	—		
SK115	150	1.0	30.0	50.0	1.0	0.92	—		
SK120	200	1.0	30.0	50.0	1.0	0.92	—		
SK125	250	1.0	30.0	50.0	1.0	0.95	—		
SK22	20	2.0	50.0	100.0	2.0	0.55	—		
SK23	30	2.0	50.0	100.0	2.0	0.55	—		
SK24	40	2.0	50.0	100.0	2.0	0.55	—		
SK245	45	2.0	50.0	100.0	2.0	0.55	—		
SK25	50	2.0	50.0	100.0	2.0	0.70	—		
SK26	60	2.0	50.0	100.0	2.0	0.70	—		
SK28	80	2.0	50.0	50.0	2.0	0.85	—		
SK210	100	2.0	50.0	50.0	2.0	0.85	—		
SK215	150	2.0	50.0	50.0	2.0	0.92	—		
SK220	200	2.0	50.0	50.0	2.0	0.92	—		
SK225	250	2.0	50.0	50.0	2.0	0.95	—		
SK22U	20	2.0	60.0	100.0	2.0	0.50	—		
SK23U	30	2.0	60.0	100.0	2.0	0.50	—		
SK24U	40	2.0	60.0	100.0	2.0	0.50	—		
SK245U	45	2.0	60.0	100.0	2.0	0.50	—		
SK25U	50	2.0	60.0	100.0	2.0	0.67	—		
SK26U	60	2.0	60.0	100.0	2.0	0.67	—		
SK28U	80	2.0	60.0	50.0	2.0	0.82	—		
SK210U	100	2.0	60.0	50.0	2.0	0.82	—		
SK215U	150	2.0	60.0	50.0	2.0	0.90	—		
SK220U	200	2.0	60.0	50.0	2.0	0.90	—		
SK225U	250	2.0	60.0	50.0	2.0	0.92	—		
SK24L	40	2.0	50.0	500.0	2.0	0.45	—		
SK26L	60	2.0	50.0	500.0	2.0	0.50	—		
SK28L	80	2.0	50.0	300.0	2.0	0.60	—		
SK210L	100	2.0	50.0	300.0	2.0	0.60	—		
SK215L	150	2.0	50.0	300.0	2.0	0.80	—		



SMA SMB

Surface Mount/Schottky Barrier Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Maximum Reverse Recovery Time	Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	T _{rr}	
	V	V	A	uA	A	V	ns	
SK220L	200	2.0	50.0	300.0	2.0	0.80	—	DO-214AAV SMB
SK32	20	3.0	80.0	100.0	3.0	0.55	—	
SK33	30	3.0	80.0	100.0	3.0	0.55	—	
SK34	40	3.0	80.0	100.0	3.0	0.55	—	
SK345	45	3.0	80.0	100.0	3.0	0.55	—	
SK35	50	3.0	80.0	100.0	3.0	0.70	—	
SK36	60	3.0	80.0	100.0	3.0	0.70	—	
SK38	80	3.0	80.0	50.0	3.0	0.85	—	
SK310	100	3.0	80.0	50.0	3.0	0.85	—	
SK315	150	3.0	80.0	50.0	3.0	0.92	—	
SK320	200	3.0	80.0	50.0	3.0	0.92	—	
SK325	250	3.0	80.0	50.0	3.0	0.95	—	
SK32U	20	3.0	80.0	100.0	3.0	0.50	—	
SK33U	30	3.0	80.0	100.0	3.0	0.50	—	
SK34U	40	3.0	80.0	100.0	3.0	0.50	—	
SK345U	45	3.0	80.0	100.0	3.0	0.50	—	
SK35U	50	3.0	80.0	100.0	3.0	0.67	—	
SK36U	60	3.0	80.0	100.0	3.0	0.67	—	
SK38U	80	3.0	80.0	50.0	3.0	0.82	—	
SK310U	100	3.0	80.0	50.0	3.0	0.82	—	
SK315U	150	3.0	80.0	50.0	3.0	0.90	—	
SK320U	200	3.0	80.0	50.0	3.0	0.90	—	
SK325L	250	3.0	80.0	50.0	3.0	0.92	—	
SK34L	40	3.0	80.0	500.0	3.0	0.45	—	
SK36L	60	3.0	80.0	500.0	3.0	0.55	—	
SK38L	80	3.0	80.0	300.0	3.0	0.60	—	
SK310L	100	3.0	80.0	300.0	3.0	0.60	—	
SK315L	150	3.0	80.0	300.0	3.0	0.80	—	
SK320L	200	3.0	80.0	300.0	3.0	0.80	—	
SK52	20	5.0	100.0	100.0	5.0	0.55	—	
SK53	30	5.0	100.0	100.0	5.0	0.55	—	
SK54	40	5.0	100.0	100.0	5.0	0.55	—	
SK545	45	5.0	100.0	100.0	5.0	0.55	—	
SK55	50	5.0	100.0	100.0	5.0	0.70	—	
SK56	60	5.0	100.0	100.0	5.0	0.70	—	
SK58	80	5.0	100.0	50.0	5.0	0.85	—	
SK510	100	5.0	100.0	50.0	5.0	0.85	—	
SK515	150	5.0	100.0	50.0	5.0	0.92	—	
SK520	200	5.0	100.0	50.0	5.0	0.92	—	
SK525	250	5.0	100.0	50.0	5.0	0.95	—	
SK52U	20	5.0	110.0	100.0	5.0	0.50	—	
SK53U	30	5.0	110.0	100.0	5.0	0.50	—	
SK54U	40	5.0	110.0	100.0	5.0	0.50	—	
SK545U	45	5.0	110.0	100.0	5.0	0.50	—	
SK55U	50	5.0	110.0	100.0	5.0	0.67	—	
SK56U	60	5.0	110.0	100.0	5.0	0.67	—	
SK58U	80	5.0	110.0	50.0	5.0	0.82	—	
SK510U	100	5.0	110.0	50.0	5.0	0.82	—	



Surface Mount/Schottky Barrier Rectifiers

Type	Maximum Peak Reverse Voltage	Maximum Average Rectifiers Current	Maximum Forward Peak Surge Current @8.3ms Superimposed	Maximum Reverse Current @Ta=25 °C	Maximum Forward Voltage @Ta = 25 °C		Package
	V _{RM}	I _o	I _{PSM}	I _R	I _F	V _{FM}	
	V	V	A	uA	A	V	
SK515U	150	5.0	110.0	50.0	5.0	0.90	DO-214AAV SMB
SK520U	200	5.0	110.0	50.0	5.0	0.90	
SK525U	250	5.0	110.0	50.0	5.0	0.92	
SK54L	40	5.0	120.0	500.0	5.0	0.45	
SK56L	60	5.0	120.0	500.0	5.0	0.55	
SK58L	80	5.0	120.0	300.0	5.0	0.60	
SK510L	100	5.0	120.0	300.0	5.0	0.60	
SK515L	150	5.0	120.0	300.0	5.0	0.80	
SK520L	200	5.0	120.0	300.0	5.0	0.80	
SRO545	45	5.0	120.0	300.0	5.0	0.55	
SRO550	50	5.0	120.0	300.0	5.0	0.70	
SRO560	60	5.0	120.0	300.0	5.0	0.70	
SRO580	80	5.0	120.0	50.0	5.0	0.85	
SRO5100	100	5.0	120.0	50.0	5.0	0.85	
SRO5150	150	5.0	120.0	50.0	5.0	0.90	
SRO5200	200	5.0	120.0	50.0	5.0	0.92	
SL0545	45	5.0	130.0	300.0	5.0	0.52	
SL0550	50	5.0	130.0	300.0	5.0	0.68	
SL0560	60	5.0	130.0	300.0	5.0	0.68	
SL0580	80	5.0	130.0	50.0	5.0	0.82	
SL05100	100	5.0	130.0	50.0	5.0	0.82	
SL05150	150	5.0	130.0	50.0	5.0	0.85	
SL05200	200	5.0	130.0	50.0	5.0	0.90	
SR0545L	45	5.0	140.0	300.0	5.0	0.45	
SR0550L	50	5.0	140.0	300.0	5.0	0.50	
SR0560L	60	5.0	140.0	300.0	5.0	0.50	
SR0580L	80	5.0	140.0	300.0	5.0	0.72	
SR05100L	100	5.0	140.0	300.0	5.0	0.72	
SR05150L	150	5.0	140.0	300.0	5.0	0.80	
SR05200L	200	5.0	140.0	300.0	5.0	0.85	
SB1045L	45	10.0	150.0	300.0	10.0	0.50	
SB1050L	50	10.0	150.0	300.0	10.0	0.50	
SB1060L	60	10.0	150.0	300.0	10.0	0.55	
SB1080L	80	10.0	150.0	300.0	10.0	0.75	
SB10100L	100	10.0	150.0	300.0	10.0	0.75	
SB10150L	150	10.0	150.0	300.0	10.0	0.78	
SL1045	45	10.0	250.0	300.0	10.0	0.45	
SL1050	50	10.0	250.0	300.0	10.0	0.47	
SL1060	60	10.0	250.0	300.0	10.0	0.50	
SL1080	80	10.0	250.0	300.0	10.0	0.75	
SL10100	100	10.0	250.0	300.0	10.0	0.75	
SL10150	150	10.0	250.0	300.0	10.0	0.78	
SR1045L	45	10.0	275.0	300.0	10.0	0.42	
SR1050L	50	10.0	275.0	300.0	10.0	0.45	
SR1060L	60	10.0	275.0	300.0	10.0	0.45	

TO-227



Surface Mount/Transient Voltage Suppressors

Type	Device marking code unipolar	Device marking code bipolar	Breakdown Voltage			Stand-off Voltage	Maximum Reverse Leakage at Vm	Maximum Peak Pulse Current	Maximum Clamping Voltage at Ippm	Package
			VBR(Volts)							
			min.	max.	mA	V	UA	A	V	
SMAJ33/33C	ML	CL	36.70	44.90	1.0	33	5.0	10.30	59.0	DO-214AAV SMB
SMAJ33A/33CA	MM	CM	36.70	40.60	1.0	33	5.0	11.30	53.3	
SMAJ36/36C	MN	CN	40.00	48.90	1.0	36	5.0	9.30	64.3	
SMAJ40A/40CA	MP	CP	40.00	44.20	1.0	36	5.0	10.30	58.1	
SMAJ40/40C	MQ	CQ	44.40	54.30	1.0	40	5.0	8.40	71.4	
SMAJ40A/40CA	MR	CR	44.40	49.10	1.0	40	5.0	9.30	64.5	
SMA43J/43C	MS	CS	47.80	58.40	1.0	43	5.0	7.80	76.7	
SMAJ43A/43CA	MT	CT	47.70	52.80	1.0	43	5.0	8.60	69.4	
SMAJ45/45C	MU	CU	50.00	61.10	1.0	45	5.0	7.50	80.3	
SMAJ45/45CA	MV	CV	50.00	55.30	1.0	45	5.0	8.30	72.7	
SMAJ48/48C	MW	CW	53.30	65.10	1.0	48	5.0	7.00	85.5	
SMAJ48A/48CA	MX	CX	53.30	58.90	1.0	48	5.0	7.80	77.4	
SMAJ51/51C	MY	CY	56.70	69.30	1.0	51	5.0	6.60	91.1	
SMAJ51A/51CA	MZ	CZ	56.70	62.70	1.0	51	5.0	7.30	82.4	
SMAJ54/54C	ND	DD	60.00	73.30	1.0	54	5.0	6.20	96.3	
SMAJ54A/54CA	NE	DE	60.00	66.30	1.0	54	5.0	6.90	87.1	
SMAJ58/58C	NF	DF	64.40	78.70	1.0	58	5.0	5.80	103.0	
SMAJ58A/58CA	NG	DG	64.40	71.20	1.0	58	5.0	6.40	93.6	
SMAJ60/60C	NH	DH	66.70	81.50	1.0	60	5.0	5.60	107.0	
SMAJ60A/60CA	NK	DK	66.70	73.70	1.0	60	5.0	6.20	96.8	
SMAJ64/64C	NL	DL	71.10	86.90	1.0	64	5.0	5.30	114.0	
SMAJ64A/64CA	NM	DM	71.10	78.60	1.0	64	5.0	5.80	103.0	
SMAJ70/70C	NN	DN	77.80	95.10	1.0	70	5.0	4.80	125.0	
SMAJ70A/70CA	NP	DP	77.80	86.00	1.0	70	5.0	5.30	113.0	
SMAJ75/75C	NQ	DQ	83.30	102.00	1.0	75	5.0	4.50	134.0	
SMAJ75A/75CA	NR	DR	83.30	92.10	1.0	75	5.0	5.00	121.0	
SMAJ78/78C	NS	DS	86.70	106.00	1.0	78	5.0	4.30	139.0	
SMAJ78A/78CA	NT	DT	86.70	95.80	1.0	78	5.0	4.80	126.0	
SMAJ85/85C	NU	DU	94.40	115.00	1.0	85	5.0	4.00	151.0	
SMAJ85A/85CA	NV	DV	94.40	104.00	1.0	85	5.0	4.40	137.0	
SMAJ90/90C	NW	DW	100.00	122.00	1.0	90	5.0	3.80	160.0	
SMAJ90A/90CA	NX	DX	100.00	111.00	1.0	90	5.0	4.10	146.0	
SMAJ100/100C	NY	DY	110.00	136.00	1.0	100	5.0	3.40	179.0	
SMAJ100A/100CA	NZ	DZ	110.00	123.00	1.0	100	5.0	3.70	162.0	
SMAJ110/110C	PD	ED	122.00	149.00	1.0	110	5.0	3.10	196.0	
SMAJ110A/110CA	PE	EE	122.00	135.00	1.0	110	5.0	3.40	177.0	
SMAJ120/120C	PF	EF	133.00	163.00	1.0	120	5.0	2.80	214.0	
SMAJ120A/120CA	PG	EG	133.00	147.00	1.0	120	5.0	3.10	193.0	
SMA130/130C	PH	EH	144.00	176.00	1.0	130	5.0	2.60	231.0	
SMAJ130A/130CA	PK	EK	144.00	159.00	1.0	130	5.0	2.90	209.0	
SMAJ150/150C	PL	EL	167.00	204.00	1.0	150	5.0	2.20	268.0	
SMAJ150A/150CA	PM	EM	167.00	185.00	1.0	150	5.0	2.50	243.0	
SMAJ160/160C	PN	EN	178.00	218.00	1.0	160	5.0	2.10	287.0	
SMAJ160A/160CA	PP	EP	178.00	197.00	1.0	160	5.0	2.30	259.0	
SMAJ170/170C	PQ	EQ	189.00	231.00	1.0	170	5.0	2.00	304.0	
SMAJ170A/170CA	PR	ER	189.00	209.00	1.0	170	5.0	2.20	275.0	

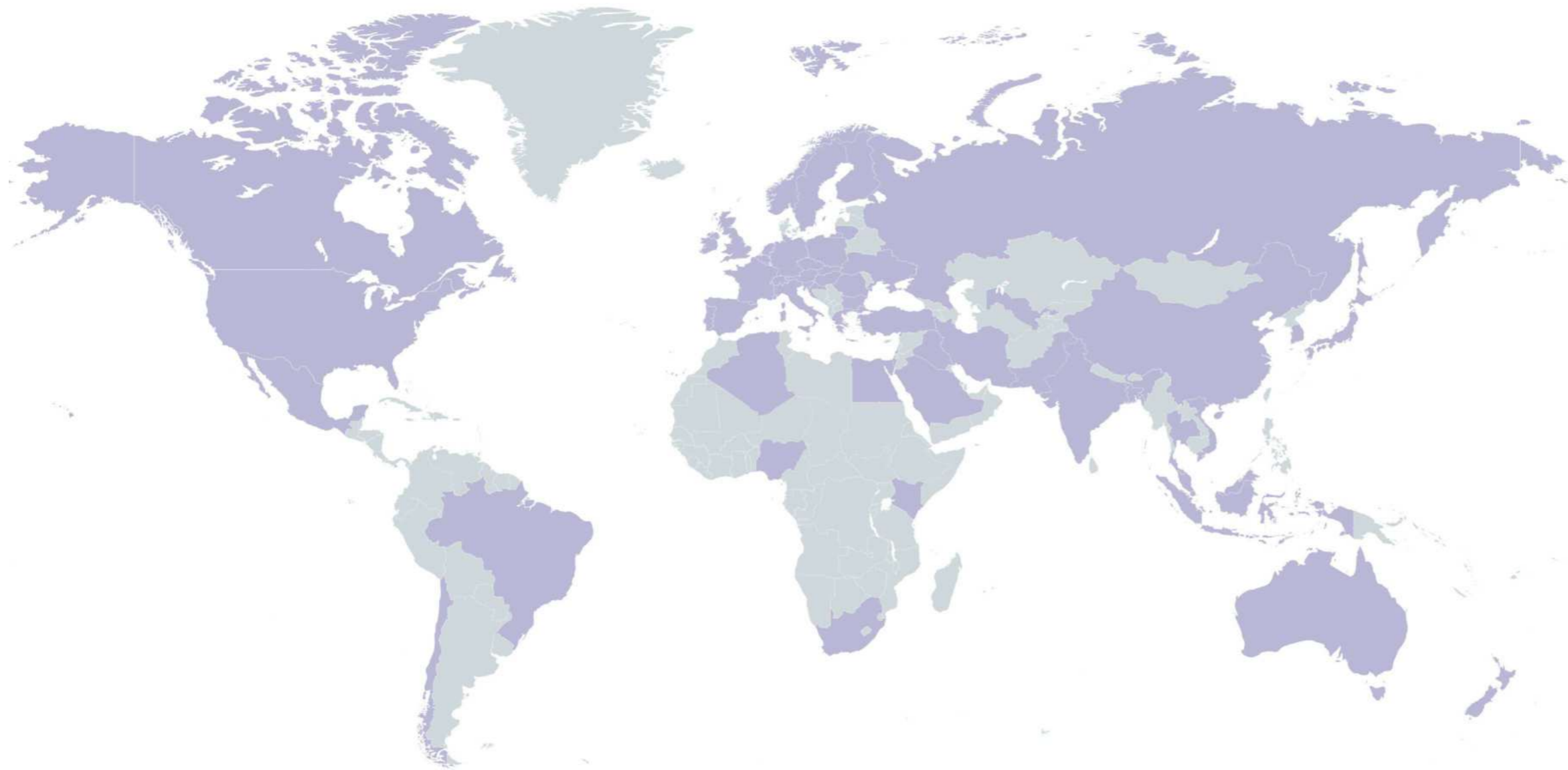
End of Product Catalog

Certificates









Global Footprint

Since 2019, our company has been placing a growing emphasis on expanding our export business. Explore the global reach of Mlccbase and see where our products have reached! We eagerly anticipate your addition to our growing list of diversified clients.

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