

## Features

- Guard Ring Protection
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage
- High Current Capability
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

### **Maximum Ratings**

- Operating Junction Temperature Range(20V~40V): -55°C to +125°C
- Operating Junction Temperature Range(60V~200V): -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 75°C/W Junction to Ambient
- Typical Thermal Resistance: 25°C/W Junction to Case
- Typical Thermal Resistance: 15°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS22-L	SS22	20V	14V	20V
SS23-L	SS23	30V	21V	30V
SS24-L	SS24	40V	28V	40V
SS25-L	SS25	50V	35V	50V
SS26-L	SS26	60V	42V	60V
SS28-L	SS28	80V	56V	80V
SS210-L	SS210	100V	70V	100V
SS2150-L	S2150	150V	105V	150V
SS220-L	SS220	200V	140V	200V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0A	See Fig. 1
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SS22-L~SS24-L SS25-L~SS26-L SS28-L~SS210-L SS2150-L~SS220-L	V <sub>F</sub>	0.55V 0.70V 0.85V 0.90V	I <sub>FM</sub> =2.0A; T <sub>J</sub> =25⁰C*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25⁰C; T <sub>J</sub> =100⁰C;
Typical Junction Capacitance SS22-L~SS28-L SS210-L SS2150-L~SS220-L	CJ	90pF 70pF 40pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

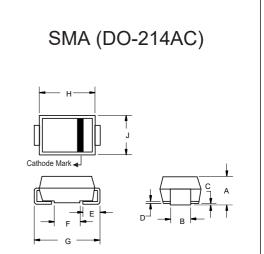
\*Pulse test: Pulse width 300  $\mu sec,$  Duty cycle 2%

Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

2. Halogen free "Green" products are defined as those which contain <900ppm bromine,

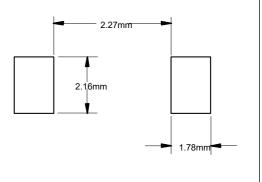
<900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.





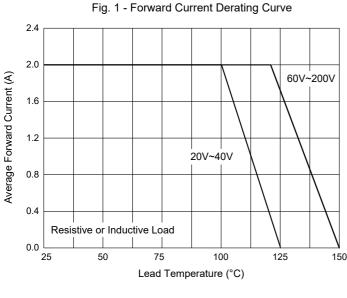
DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
A	0.075	0.096	1.90	2.44		
В	0.050	0.064	1.27	1.63		
С	0.002	0.008	0.051	0.203		
D		0.020		0.51		
E	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.189	0.220	4.80	5.59		
Н	0.157	0.187	4.00	4.75		
J	0.090	0.115	2.25	2.92		

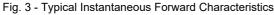
#### SUGGESTED SOLDER PAD LAYOUT





## **Curve Characteristics**





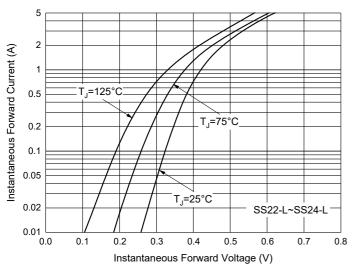
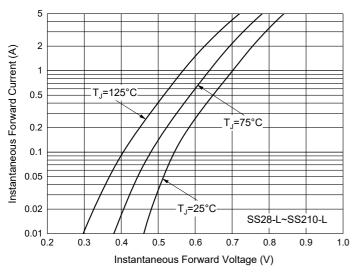


Fig. 5 - Typical Instantaneous Forward Characteristics



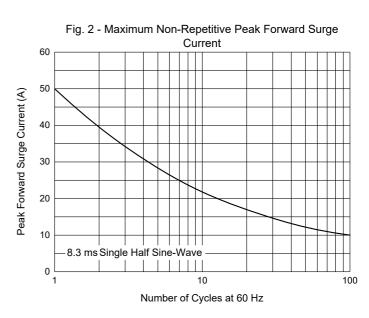
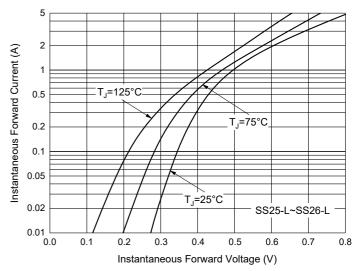
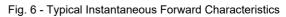
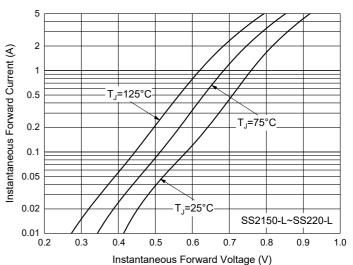


Fig. 4 - Typical Instantaneous Forward Characteristics









# **Curve Characteristics**

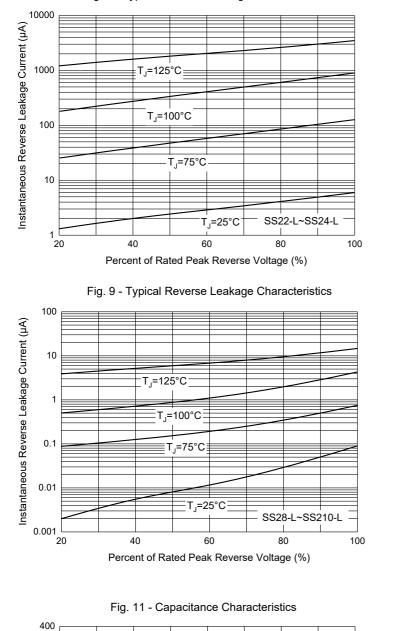


Fig. 7 - Typical Reverse Leakage Characteristics

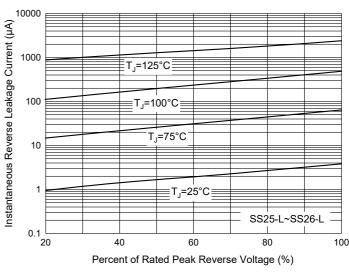
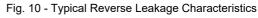
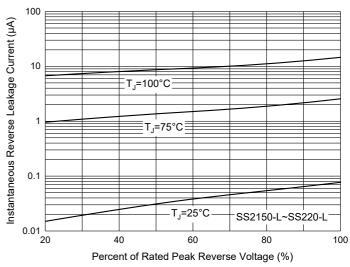
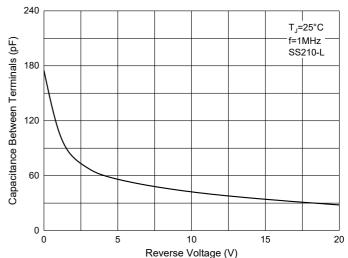


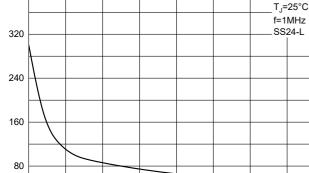
Fig. 8 - Typical Reverse Leakage Characteristics











10

Reverse Voltage (V)

15

5

0 L 0

Capacitance Between Terminals (pF)

20



## **Ordering Information**

Device	Packing	
SS22-LTP~SS220-LTP	Tape&Reel: 5Kpcs/Reel	

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