

## **Features**

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Guard Ring Protection
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage
- High Current Capability
- 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~100V): -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
SS22HE3-L	SS22	20V	14V	20V
SS23HE3-L	SS23	30V	21V	30V
SS24HE3-L	SS24	40V	28V	40V
SS25HE3-L	SS25	50V	35V	50V
SS26HE3-L	SS26	60V	42V	60V
SS28HE3-L	SS28	80V	56V	80V
SS210HE3-L	SS210	100V	70V	100V

## 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 SS22HE3-L~SS24HE3-L SS25HE3-L~SS26HE3-L SS28HE3-L~SS210HE3-L	V <sub>F</sub>	0.55V 0.70V 0.85V	I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA	T <sub>J</sub> =25⁰C;
Typical Junction Capacitance SS22HHE3-L~SS28HE3-L SS210HE3-L	CJ	90pF 70pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

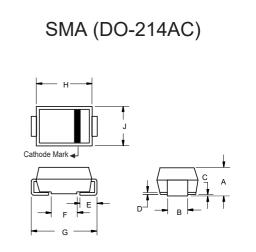
\*Pulse test: Pulse width 300 µsec, Duty cycle 2%

#### Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

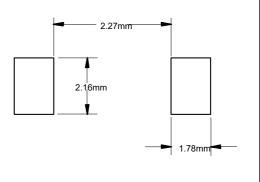
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

2 Amp				
Schottky				
Rectifier				
20 to 100 Volts				



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	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**

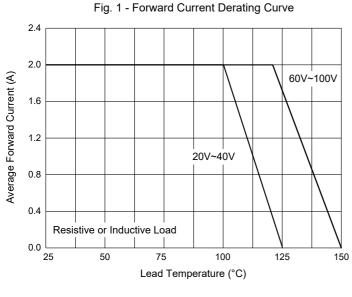


Fig. 3 - Typical Instantaneous Forward Characteristics

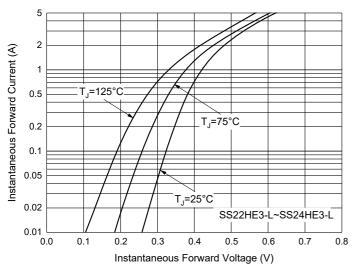
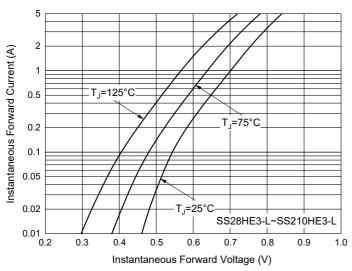


Fig. 5 - Typical Instantaneous Forward Characteristics



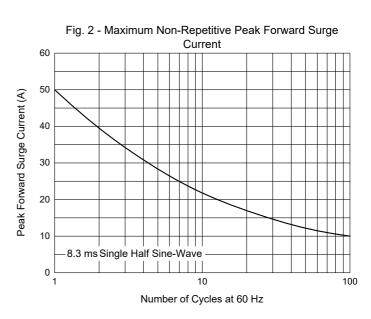


Fig. 4 - Typical Instantaneous Forward Characteristics

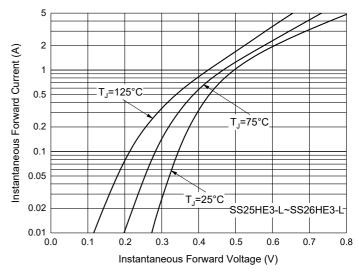
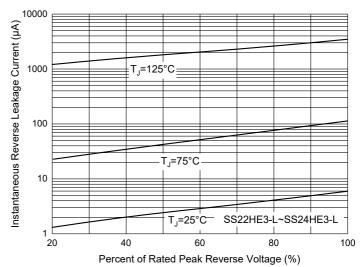


Fig. 6 - Typical Reverse Leakage Characteristics





200

160

120

80

40

0

5

10

15

Reverse Voltage (V)

20

Junction Capacitance (pF)

# **Curve Characteristics**

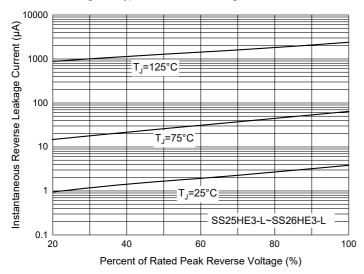


Fig.9 Capacitance Characteristics

T<sub>A</sub>=25°C f =1MHz

25

30

Fig. 7 - Typical Reverse Leakage Characteristics

Fig. 8 - Typical Reverse Leakage Characteristics

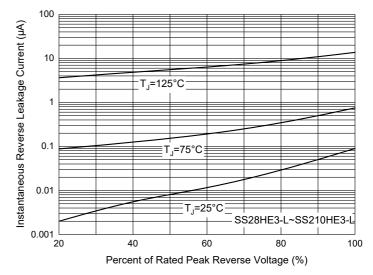
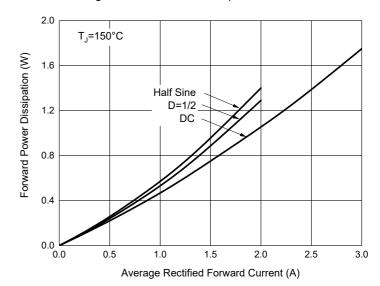


Fig.10 Forward Power Dissipation Characteristics





Device	Packing	
SS22HE3-LTP~SS210HE3-LTP	Tape&Reel: 5Kpcs/Reel	

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