

Features

- Halogen Free
- AEC-Q101 Qualified
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage and High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C(SS12-L~SS14-L)
- Operating Junction Temperature Range: -55°C to +150°C(SS15-L~SS110-L)
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 28°C/W Junction to Lead
- Maximum Thermal Resistance: 55°C/W Junction to Case
- Maximum Thermal Resistance: 88°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS12HE3-L	SS12	20V	14V	20V
SS13HE3-L	SS13	30V	21V	30V
SS14HE3-L	SS14	40V	28V	40V
SS15HE3-L	SS15	50V	35V	50V
SS16HE3-L	SS16	60V	42V	60V
SS18HE3-L	SS18	80V	56V	80V
SS110HE3-L	SS110	100V	70V	100V

**1 Amp
Schottky Rectifier
20 to 100 Volts**

SMA (DO-214AC)

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	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	
H	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

SUGGESTED SOLDER PAD LAYOUT

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	Fig.1
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	SS12HE3-L~SS14HE3-L: 0.50V SS15HE3-L~SS16HE3-L: 0.70V SS18HE3-L~SS110HE3-L: 0.85V	$I_{FM}=1.0A;$ $T_J=25°C^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	SS12HE3-L~SS16HE3-L: 0.1mA SS18HE3-L~SS110HE3-L: 0.05mA SS12HE3-L~SS16HE3-L: 10mA SS18HE3-L~SS110HE3-L: 5mA	$T_J=25°C$ $T_J=25°C$ $T_J=100°C$ $T_J=100°C$
Typical Junction Capacitance	C_J	SS12HE3-L~SS14HE3-L: 52pF SS15HE3-L~SS16HE3-L: 45pF SS18HE3-L~SS110HE3-L: 35pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse Test: Pulse Width 300 μ sec, Duty Cycle 2%
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

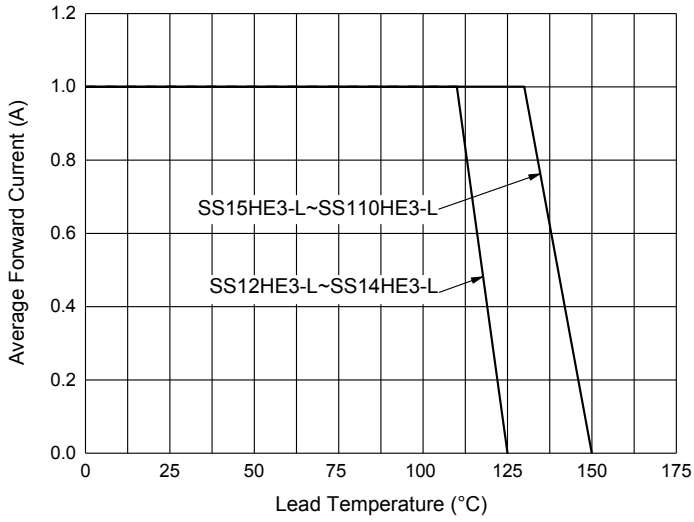


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

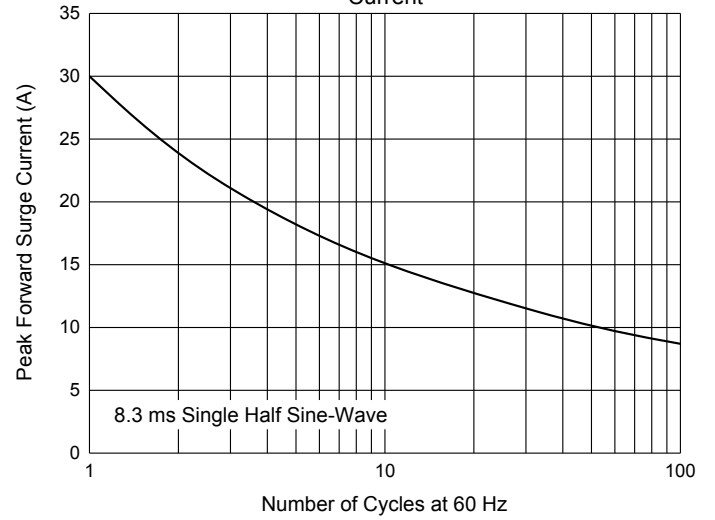


Fig. 3 - Typical Instantaneous Forward Characteristics

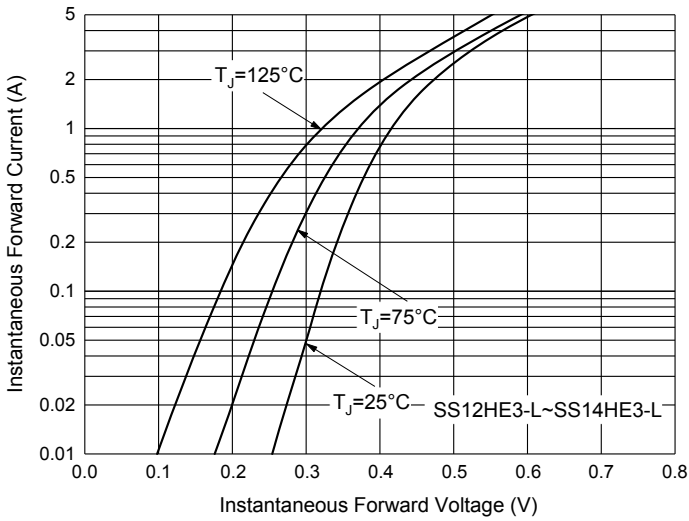


Fig. 4 - Typical Instantaneous Forward Characteristics

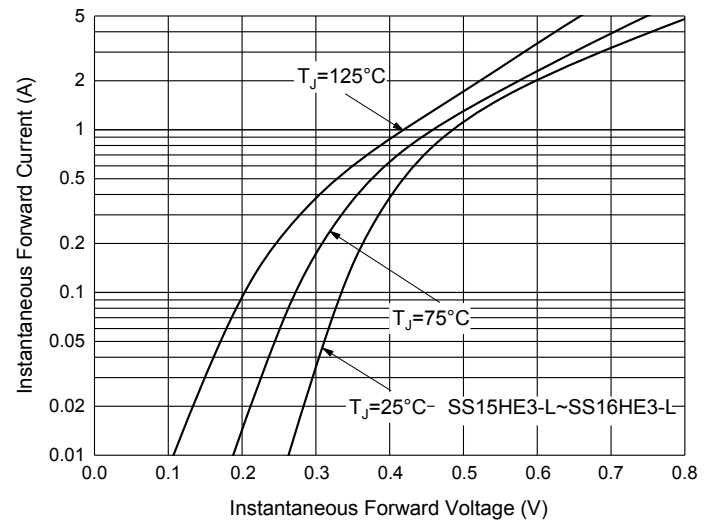


Fig. 5 - Typical Instantaneous Forward Characteristics

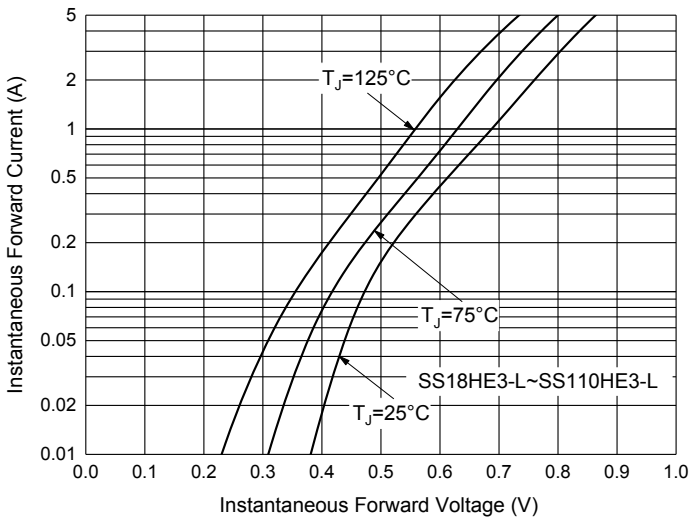
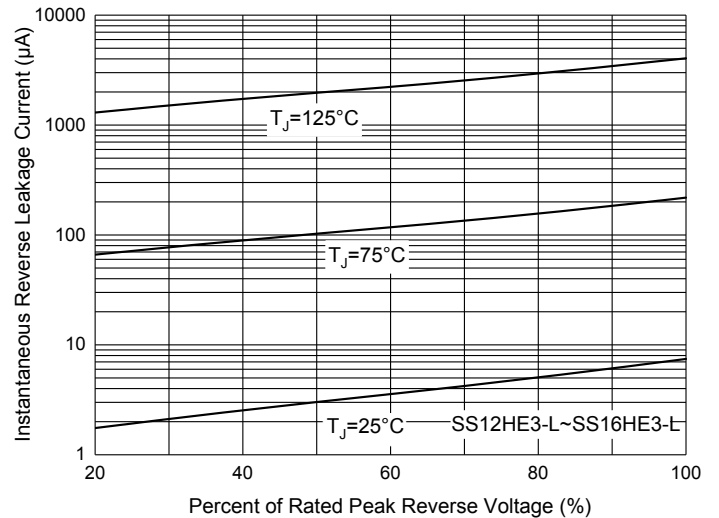
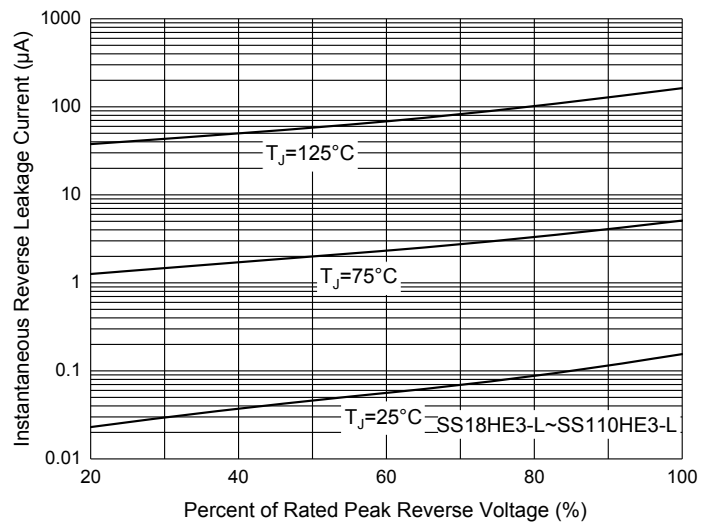


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
SS12HE3-LTP ~ SS110HE3-LTP	Tape&Reel: 5Kpcs/Reel

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.