Features

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

1.0 Amp Schottky Rectifier 20 to 100 Volts

Maximum Ratings

- Operating Junction Temperature Range(SS12E~14E): -55ºC to +125ºC
- Operating Junction Temperature Range(SS15E~110E): -55°C to +150°C
- Storage Temperature Range: -55ºC to +150ºC
- Maximum Thermal Resistance: 28°C/W Junction to Lead
- Maximum Thermal Resistance: 90°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS12E	SS12	20V	14V	20V
SS13E	SS13	30V	21V	30V
SS14E	SS14	40V	28V	40V
SS15E	SS15	50V	35V	50V
SS16E	SS16	60V	42V	60V
SS18E	SS18	80V	56V	80V
SS110E	SS110	100V	70V	100V

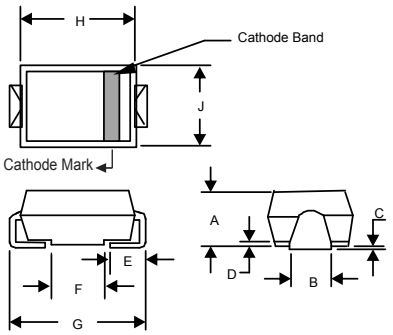
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L=100ºC
Peak Forward Surge Current	I_{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SS12E-SS14E SS15E-SS16E SS18E-SS110E	V_F	 0.60V 0.70V 0.85V	 I_{FM}=1.0A; T_J=25°C*
Maximum DC Reverse Current at Rated DC Blocking Voltage SS12E-SS14E SS15E-SS16E SS18E-SS110E	I_R	 0.1mA 10mA 50µA 5mA 10µA 2mA	 T_J=25ºC T_J=100ºC T_J=25ºC T_J=100ºC T_J=25ºC T_J=100ºC
Typical Junction Capacitance SS12E-SS16E SS18E-SS110E	C_J	 110pF 30pF	 Measured at 1.0MHz V_R=4.0V

*Pulse Test: Pulse width 300 µsec, Duty cycle 2%

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

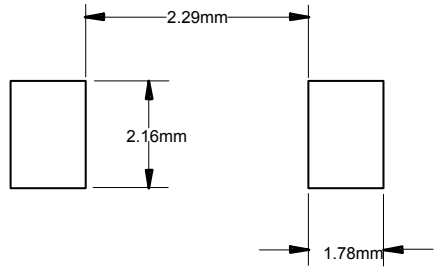
SMAE



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.096	2.01	2.44	
B	0.045	0.071	1.15	1.80	
C	0.002	0.008	0.05	0.20	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.084	1.65	2.13	
G	0.189	0.208	4.80	5.30	
H	0.157	0.180	4.00	4.57	
J	0.090	0.115	2.29	2.92	

DIMENSIONS

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

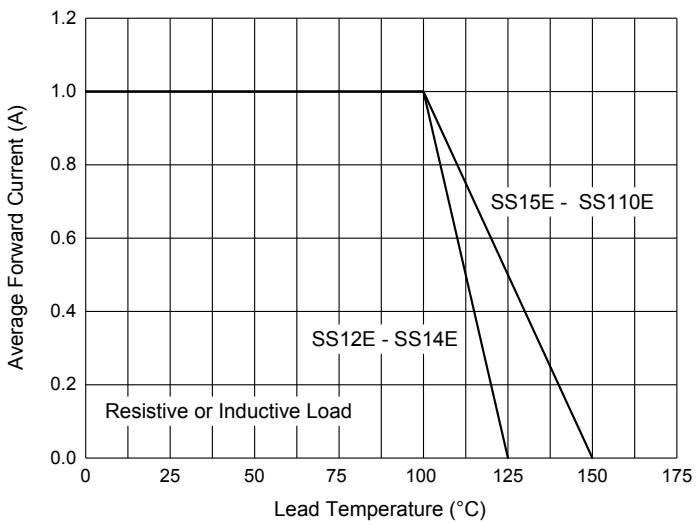


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

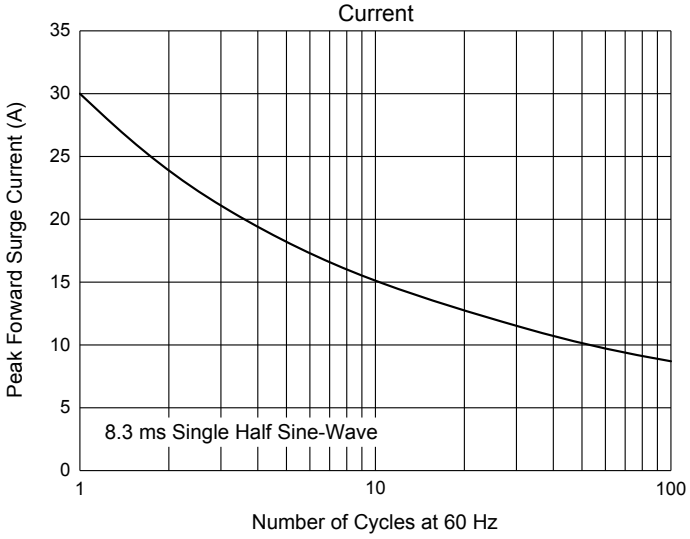


Fig. 3 - Typical Instantaneous Forward Characteristics

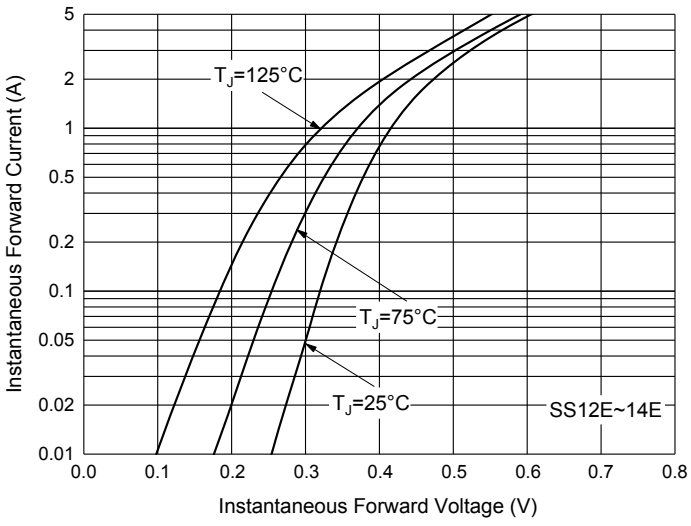


Fig. 4 - Typical Instantaneous Forward Characteristics

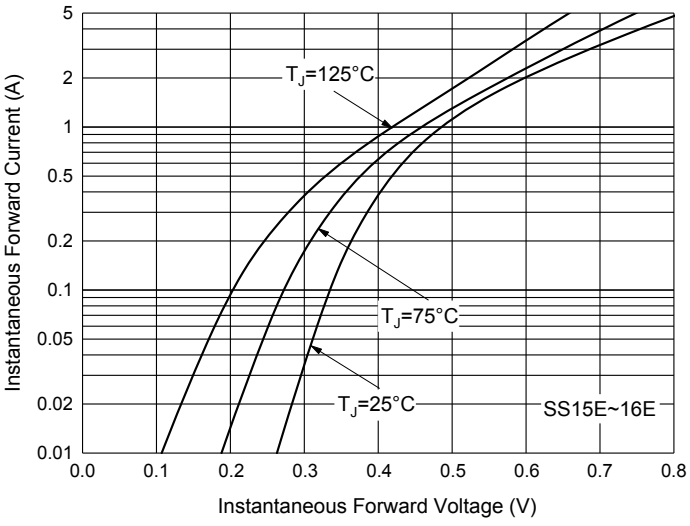


Fig. 5 - Typical Instantaneous Forward Characteristics

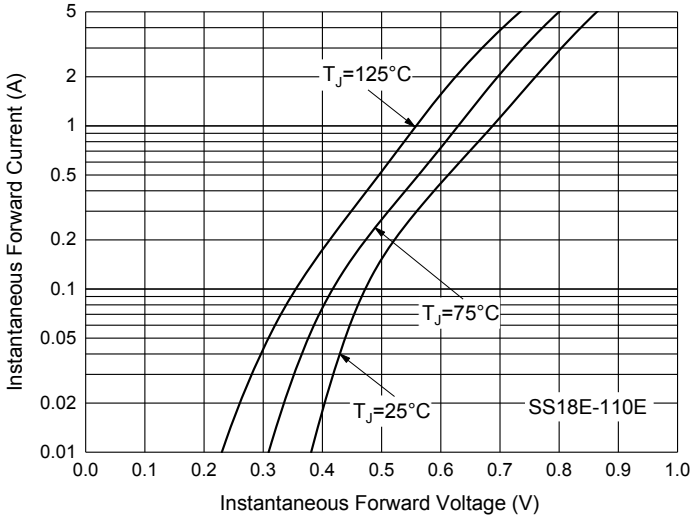
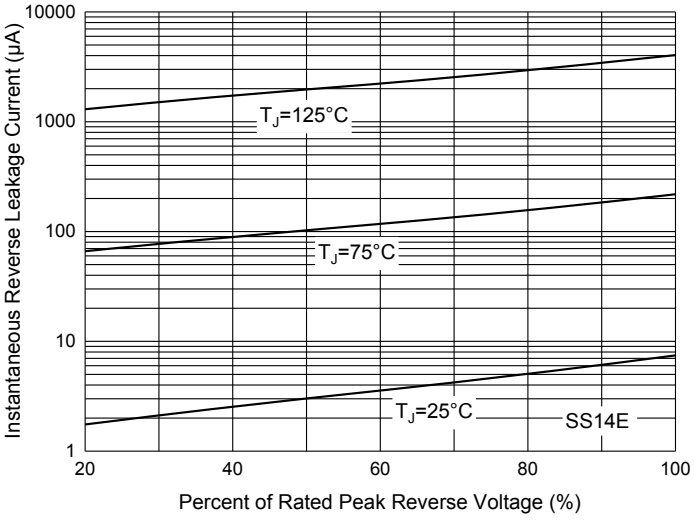


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

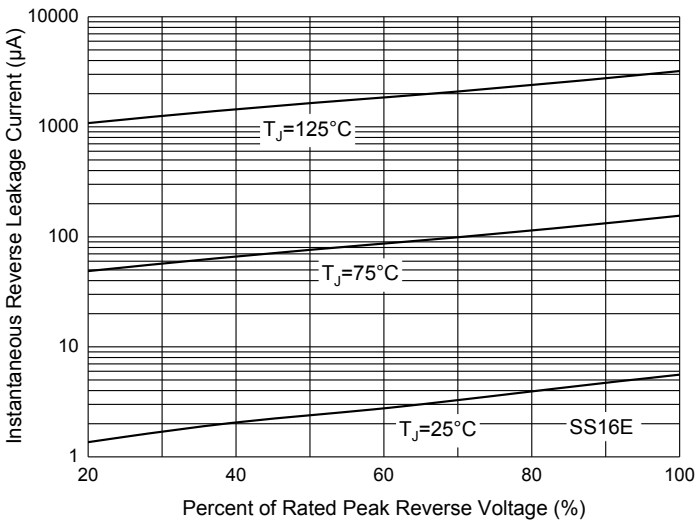
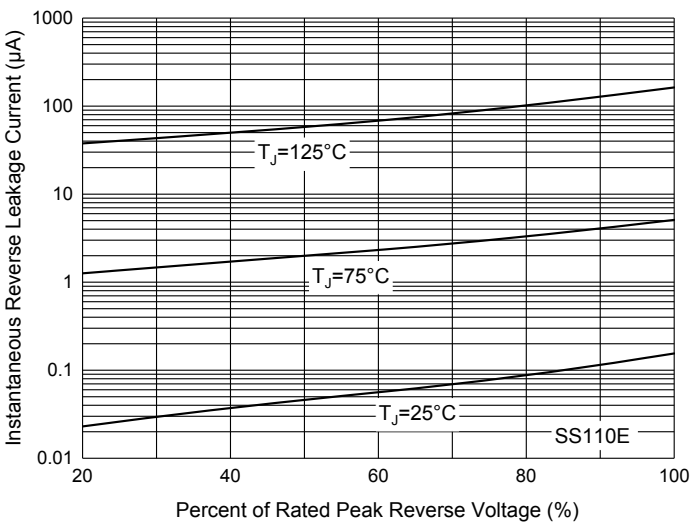


Fig. 8 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 6Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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