

## Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("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
SS12-L	SS12	20V	14V	20V
SS13-L	SS13	30V	21V	30V
SS14-L	SS14	40V	28V	40V
SS15-L	SS15	50V	35V	50V
SS16-L	SS16	60V	42V	60V
SS18-L	SS18	80V	56V	80V
SS110-L	SS110	100V	70V	100V

## 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 SS12-L~SS14-L SS15-L~SS16-L SS18-L~SS110-L	$V_F$	0.50V 0.70V 0.85V	$I_{FM}=1.0A;$ $T_J=25^\circ C^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage SS12-L~SS16-L SS18-L~SS110-L SS12-L~SS16-L SS18-L~SS110-L	$I_R$	0.1mA 0.05mA 10mA 5mA	$T_J=25^\circ C$ $T_J=25^\circ C$ $T_J=100^\circ C$ $T_J=100^\circ C$
Typical Junction Capacitance SS12-L~SS14-L SS15-L~SS16-L SS18-L~SS110-L	$C_J$	52pF 45pF 35pF	Measured at 1.0MHz, $V_R=4.0V$

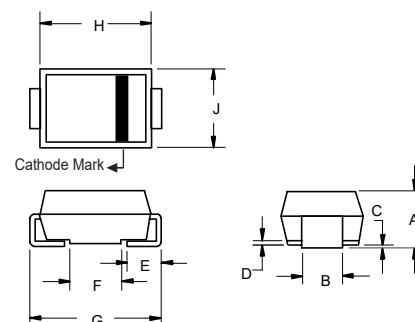
\*Pulse Test: Pulse Width 300  $\mu$ sec, Duty Cycle 2%

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.

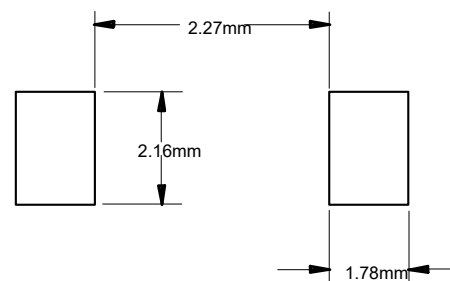
# 1 Amp Schottky Rectifier 20 to 100 Volts

## SMA (DO-214AC)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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



## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

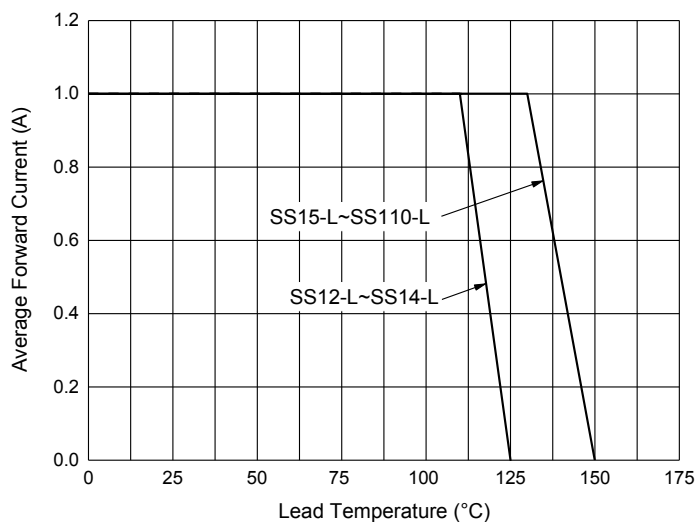


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

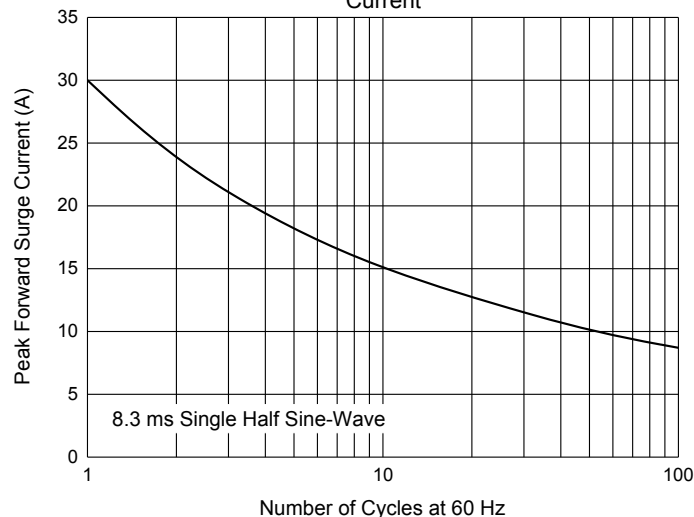


Fig. 3 - Typical Instantaneous Forward Characteristics

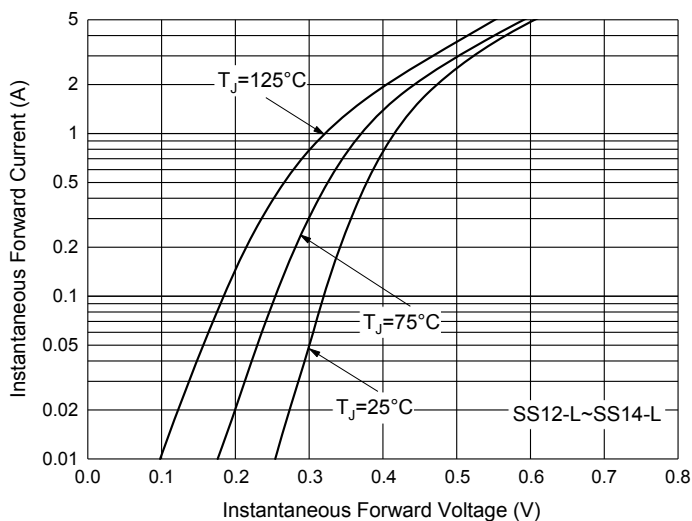


Fig. 4 - Typical Instantaneous Forward Characteristics

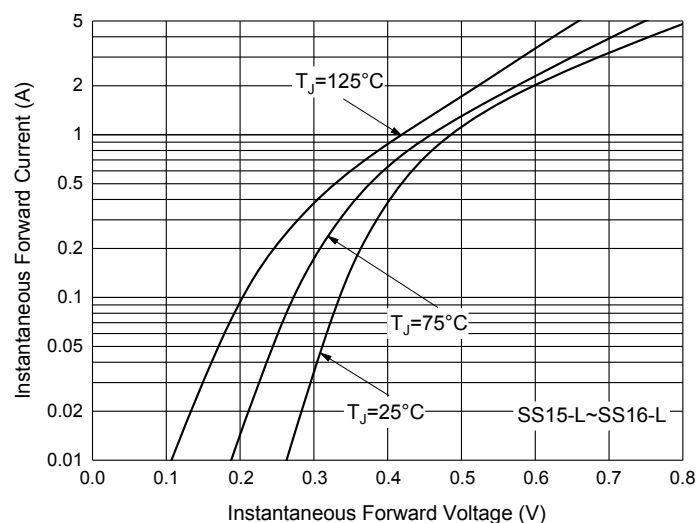


Fig. 5 - Typical Instantaneous Forward Characteristics

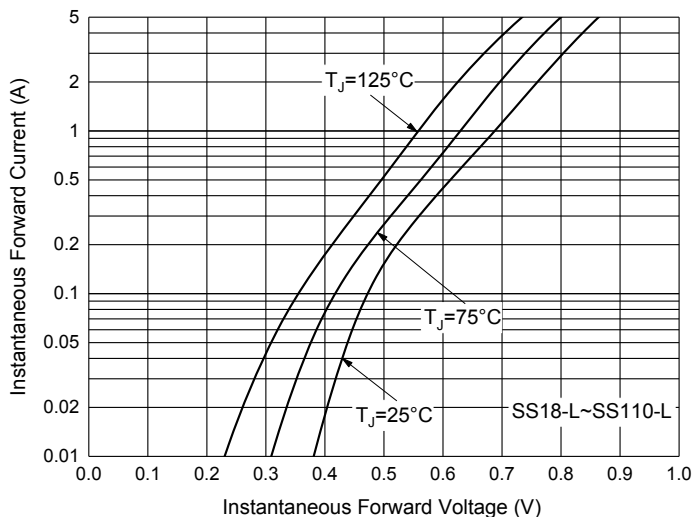
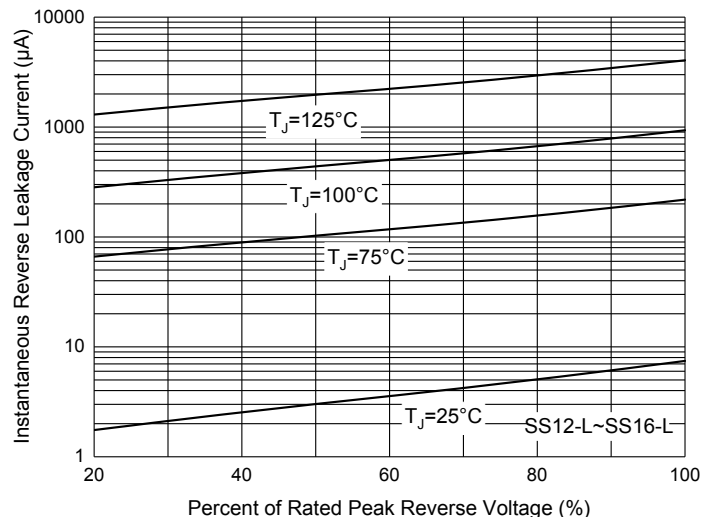


Fig. 6 - Typical Reverse Leakage Characteristics



## Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

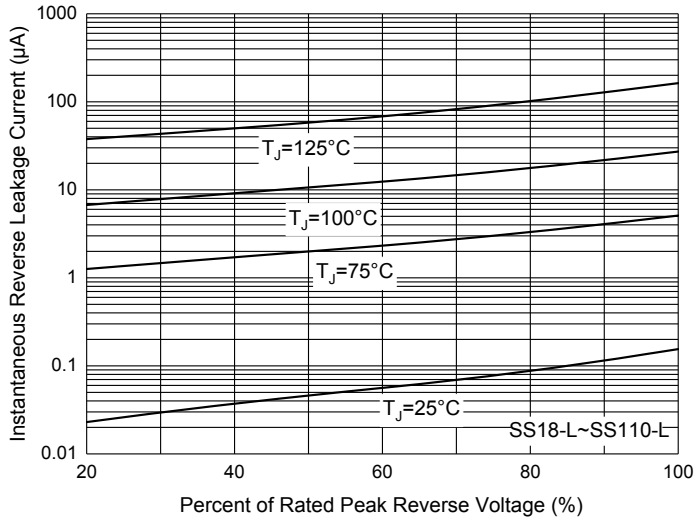
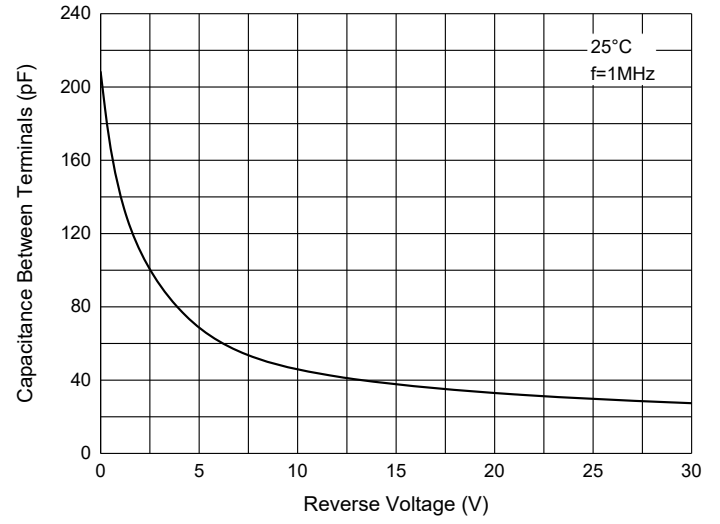


Fig. 8 - Capacitance Characteristics



## Ordering Information

Device	Packing
SS12-LTP ~ SS110-LTP	Tape&Reel: 5Kpcs/Reel

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