1 Amp Surface Mount Schottky Rectifier 20 to 200 Volts

Features

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

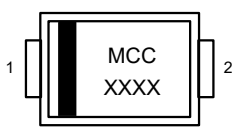
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value									Unit
		SS 12-L	SS 13-L	SS 14-L	SS 15-L	SS 16-L	SS 18-L	SS 110-L	SS 1150-L	SS 1200-L	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Working Peak Reverse Voltage	V_{RWM}										
DC Blocking Voltage	V_R										
RMS Reverse Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Average Rectified Forward Current	$I_{F(AV)}$	1									A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	30									A
Current Squared Time @1ms≤t≤8.3ms	I^2t	3.735									A^2s

Marking code

Part Number	Marking Code
SS12-L	SS12
SS13-L	SS13
SS14-L	SS14
SS15-L	SS15
SS16-L	SS16
SS18-L	SS18
SS110-L	SS110
SS1150-L	S1150
SS1200-L	S1200

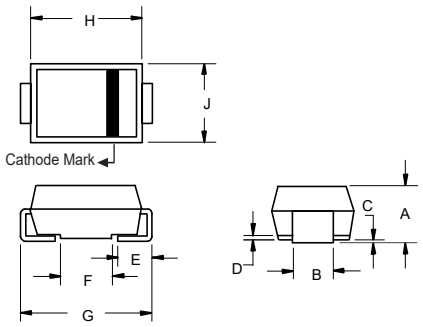
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	 XXXX = Marking Code	
2	Anode		

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

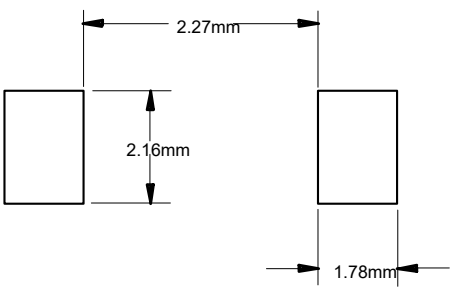
2. High temperature solder exemption applied, see EU directive annex 7a.

SMA (DO-214AC)



DIMENSIONS					
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



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range	SS12-L ~ SS14-L	-55		125	°C
T_J	Operating Junction Temperature Range	SS15-L ~ SS1200-L	-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		22		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		80		°C/W

Note:
1.Mounted on P.C.B. with 5mm*5mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage						
SS12-L ~ SS14-L	V_F	I_F=1A;T_J=25°C			0.50	V
SS15-L ~ SS16-L					0.70	
SS18-L ~ SS110-L					0.85	
SS1150-L					0.90	
SS1200-L					0.92	
Reverse Current						
SS12-L ~ SS16-L	I_R	at Rated V_R;T_J=25°C			0.1	mA
		at Rated V_R;T_J=125°C			20	
SS18-L ~ SS1200-L		at Rated V_R;T_J=25°C			0.01	
		at Rated V_R;T_J=125°C			5	
Junction Capacitance						
SS12-L ~ SS14-L	C_J	V_R=4V;f=1MHz;T_J=25°C		50		pF
SS15-L ~ SS16-L				40		
SS18-L ~ SS110-L				30		
SS1150-L ~ SS1200-L				20		

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

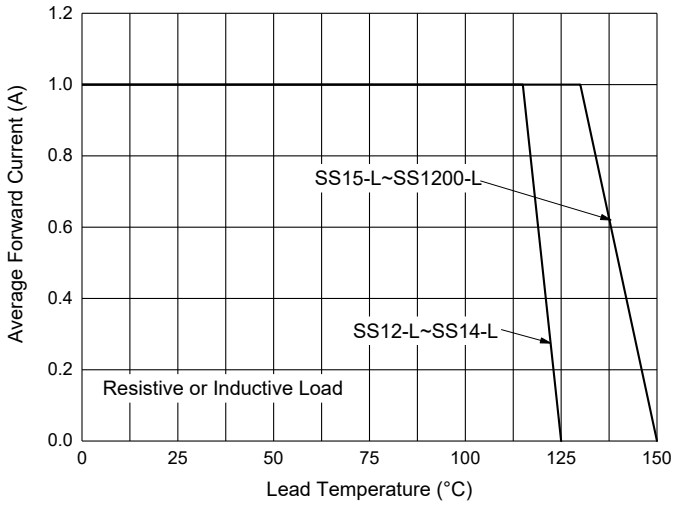


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

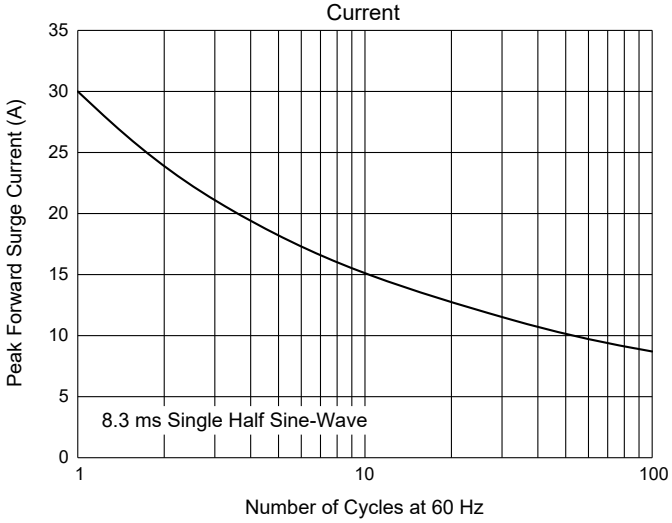


Fig. 3 - Typical Forward Characteristics

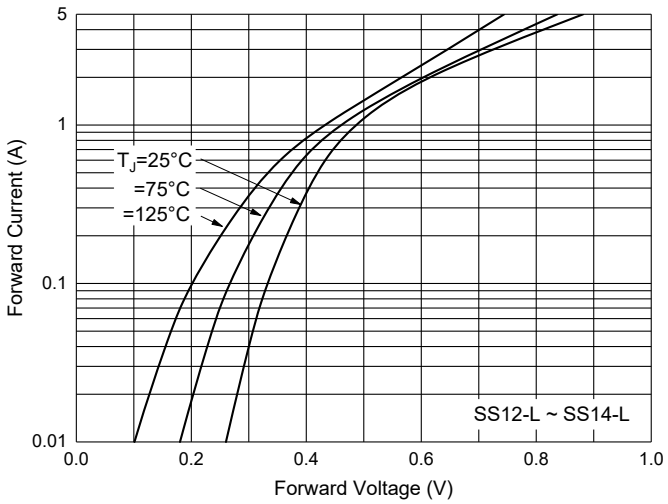


Fig. 4 - Typical Reverse Leakage Characteristics

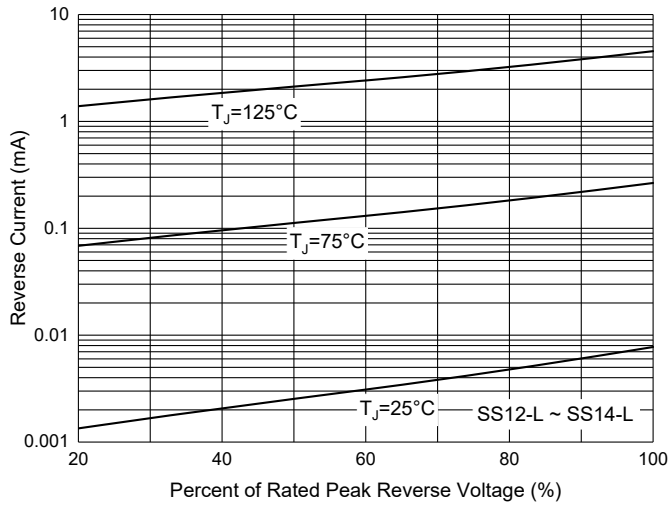


Fig. 5 - Typical Forward Characteristics

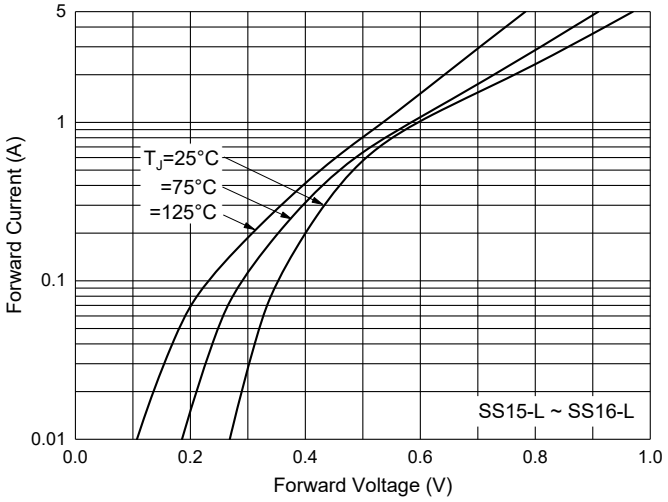
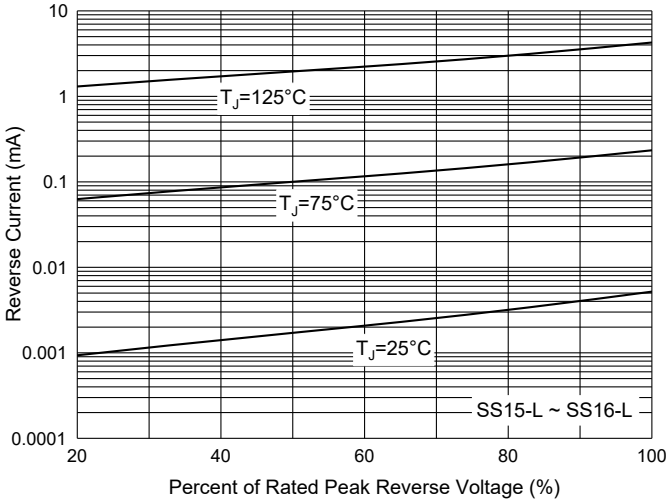


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Forward Characteristics

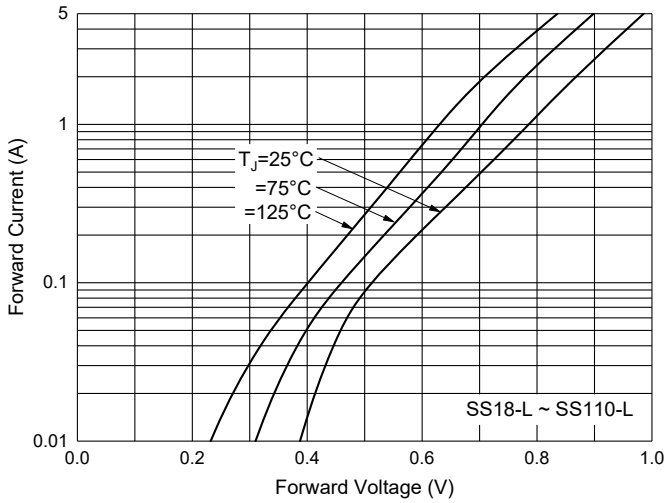


Fig. 8 - Typical Reverse Leakage Characteristics

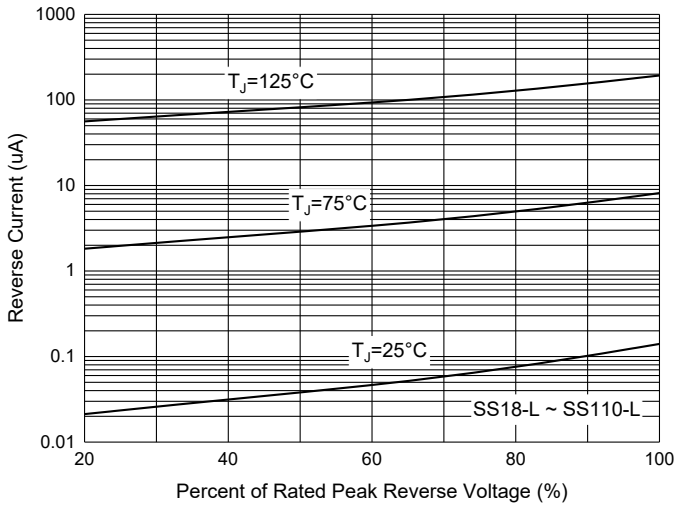


Fig. 9 - Typical Forward Characteristics

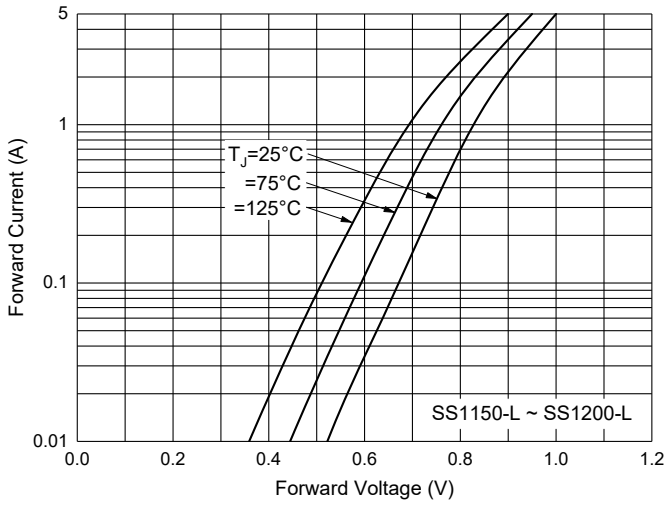


Fig. 10 - Typical Reverse Leakage Characteristics

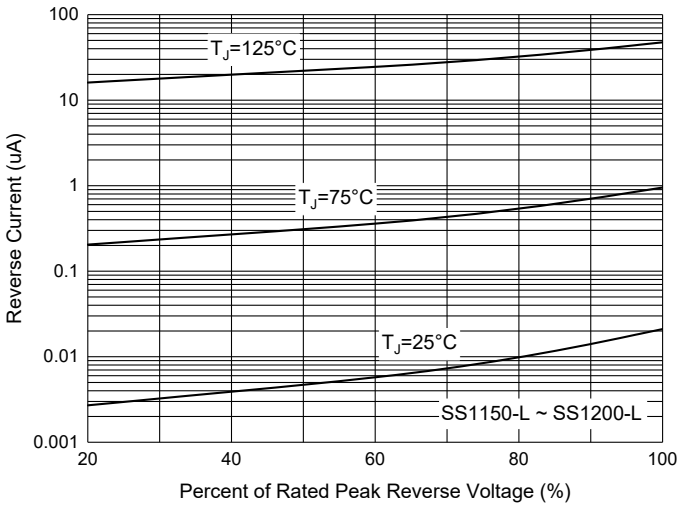


Fig. 11 - Typical Capacitance Characteristics

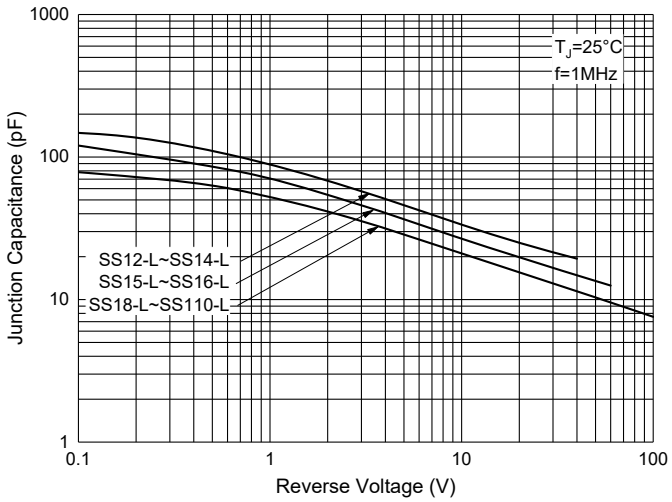
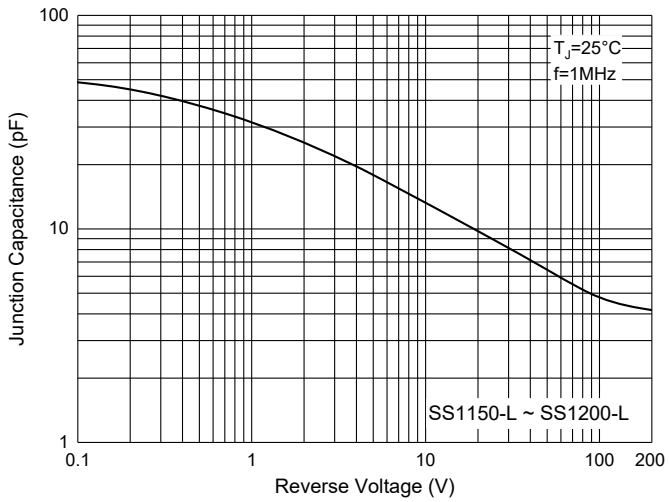


Fig. 12 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
SS12-LTP ~ SS1200-LTP	Tape&Reel:5Kpcs/Reel

单击下面可查看定价，库存，交付和生命周期等信息

>>MCC(美微科)