Features

- Halogen Free. "Green" Device (Note 1)
- High Current Capability
- Low Profile Package
- 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)

1 Amp Surface Mount Schottky Rectifier 60 to 200 Volts

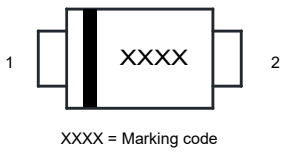
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value			Unit
		SS16HL	SS110HL	SS120HL	
Peak Repetitive Reverse Voltage	V_{RRM}	60	100	200	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_R				
RMS Reverse Voltage	V_{RMS}	42	70	140	V
Average Rectified Forward Current	$I_{F(AV)}$	1			A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	25			A
Current Squared Time @1ms≤t≤8.3ms	I^2t	2.6			A^2s

Marking Code

Part Number	Marking Code
SS16HL	FM16
SS110HL	FM110
SS120HL	FM120

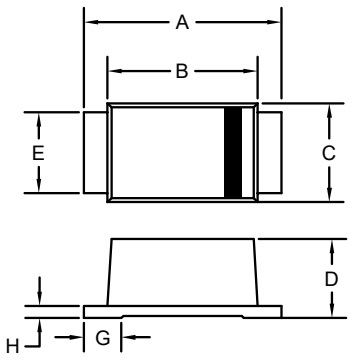
Internal Structure

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.

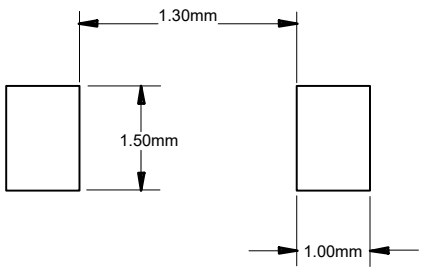
2. High temperature solder exemption applied, see EU directive annex 7a.

SOD-323HL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.091	0.106	2.30	2.70	
B	0.067	0.083	1.70	2.10	
C	0.041	0.057	1.05	1.45	
D	0.031	0.047	0.80	1.20	
E	0.035	0.045	0.90	1.15	
G	0.010	0.028	0.25	0.70	
H	0.002	0.010	0.05	0.25	

Suggested Solder Pad Layout



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Case	Note 1		45		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		90		°C/W

Note:
1.Mounted on P.C.B. with 3mm*3mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage						
SS16HL	V_F	I_F=1A;T_J=25°C			0.70	V
		I_F=1A;T_J=125°C			0.65	
SS110HL		I_F=1A;T_J=25°C			0.85	
		I_F=1A;T_J=125°C			0.70	
SS120HL		I_F=1A;T_J=25°C			0.90	
		I_F=1A;T_J=125°C			0.82	
Reverse Current						
SS16HL	I_R	at Rated V_R;T_J=25°C			0.1	mA
		at Rated V_R;T_J=125°C			20	
SS110HL ~ SS120HL		at Rated V_R;T_J=25°C			0.01	
		at Rated V_R;T_J=125°C			5	
Junction Capacitance						
SS16HL	C_J	V_R=4V;f=1MHz;T_J=25°C		40		pF
SS110HL				30		
SS120HL				20		

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

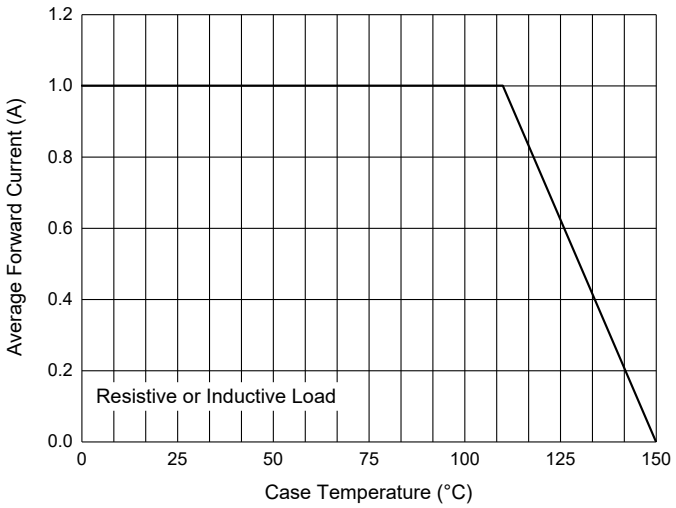


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

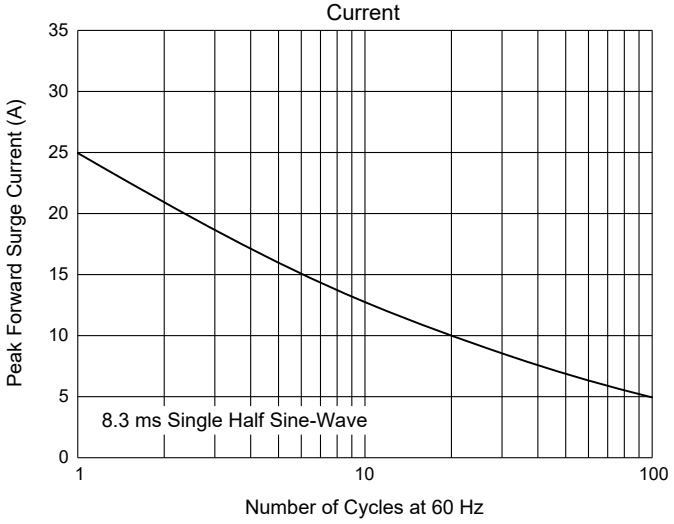


Fig. 3 - Typical Forward Characteristics

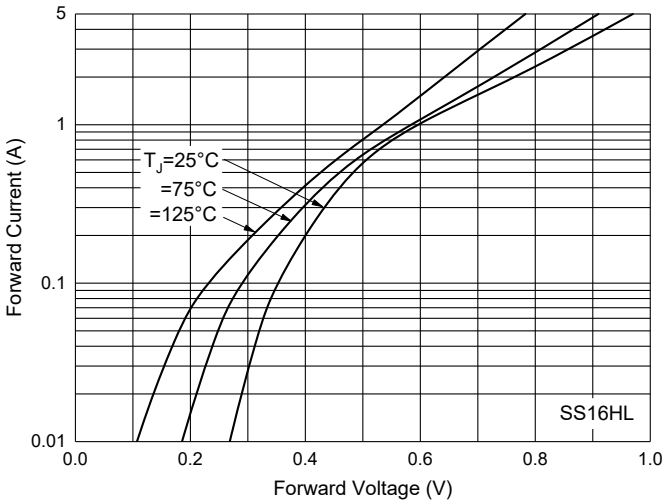


Fig. 4 - Typical Forward Characteristics

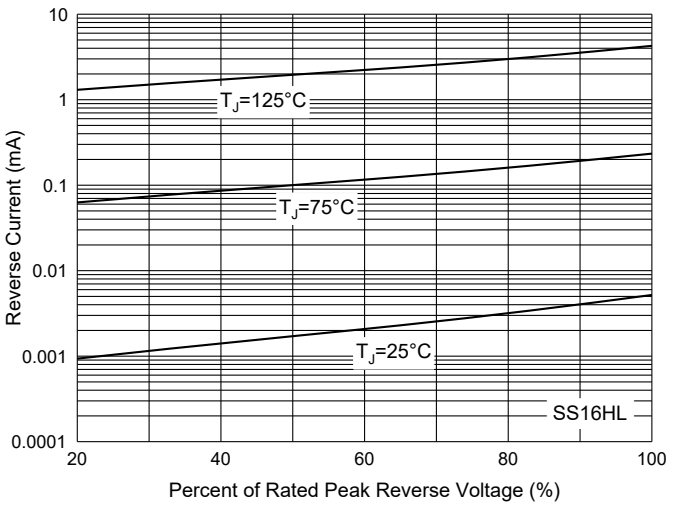


Fig. 5 - Typical Reverse Leakage Characteristics

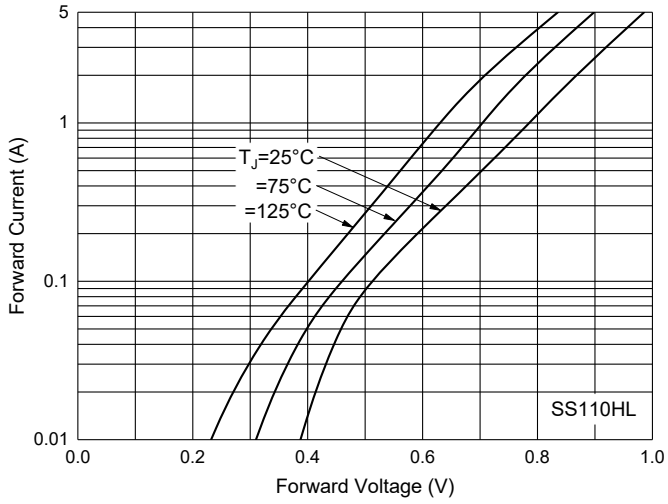
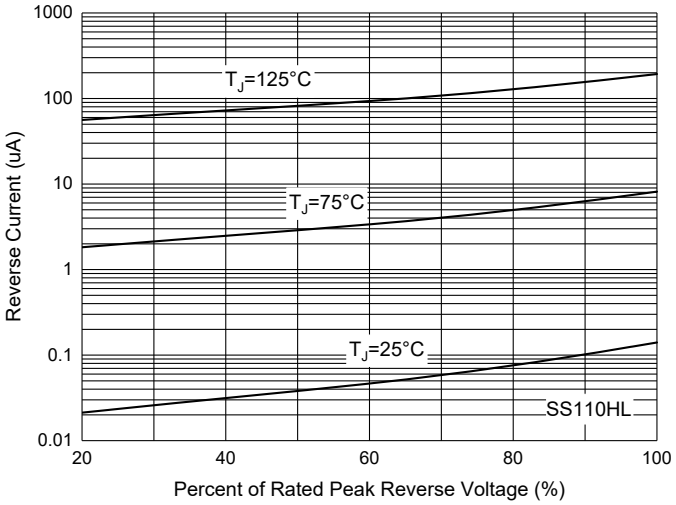


Fig. 6 - Typical Capacitance Characteristics



Curve Characteristics

Fig. 7 - Typical Forward Characteristics

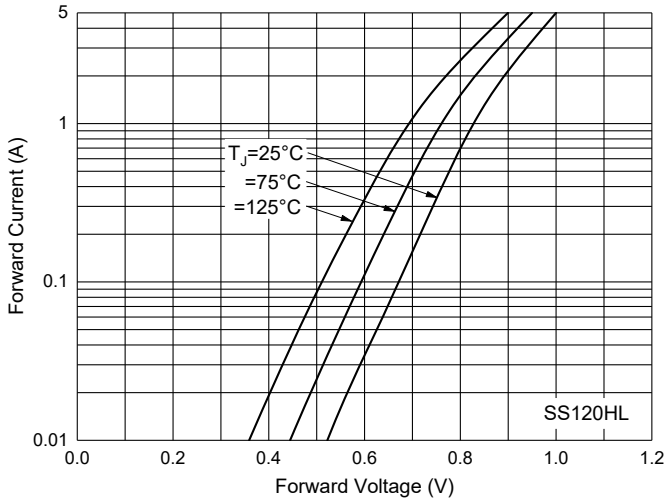


Fig. 8 - Typical Reverse Leakage Characteristics

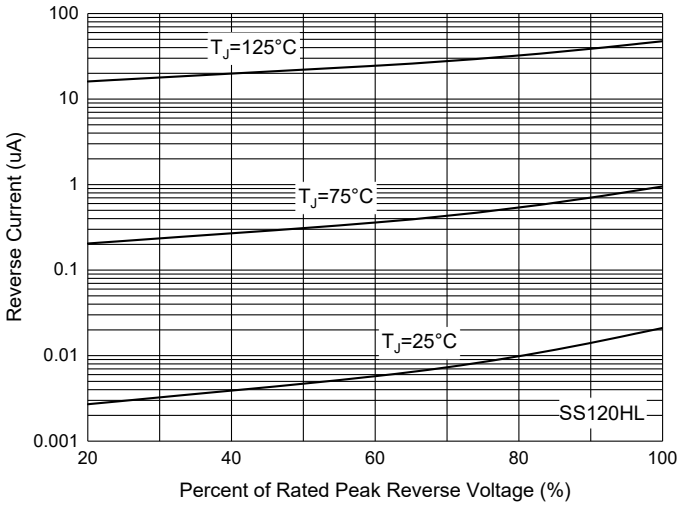


Fig. 11 - Typical Capacitance Characteristics

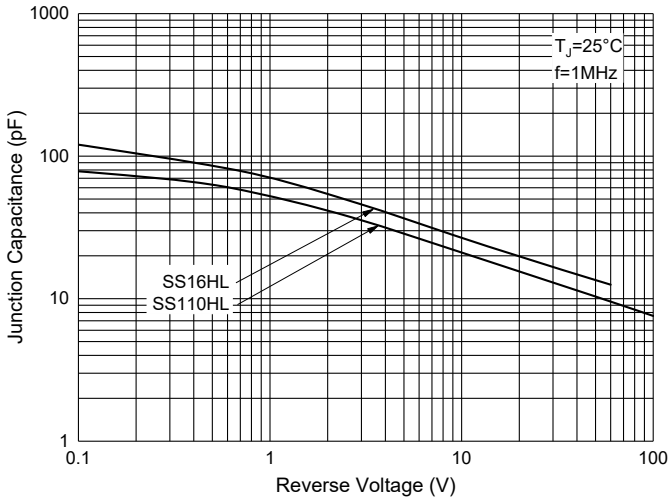
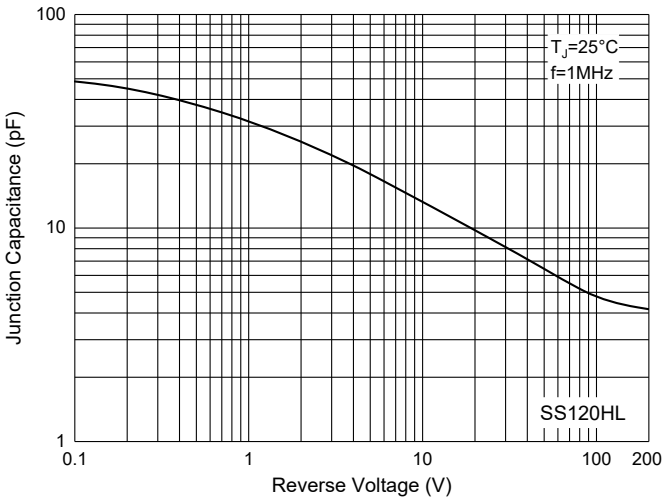


Fig. 12 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:2.5Kpcs/Reel