

SS12W SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

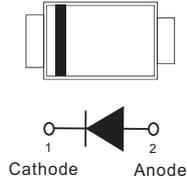
VOLTAGE 20 to 100 Volt **CURRENT** 1 Ampere

FEATURES

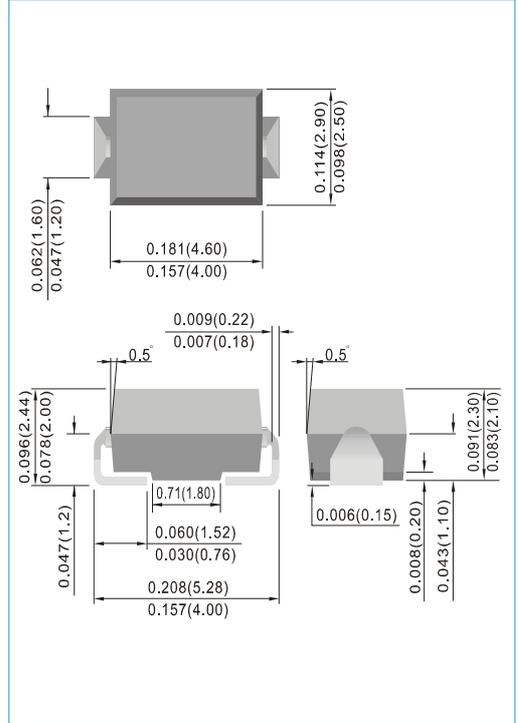
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low V_F
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: JEDEC SMA(W) molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0024 ounces, 0.0679 grams



SMA(W) Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

PARAMETER	SYMBOL	SS12W	SS13W	SS14W	SS15W	SS16W	SS18W	SS19W	S100W	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V	
Maximum Average Forward Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1								A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30								A	
Maximum Forward Voltage at 1A (Note 1)	V_F	0.5		0.7		0.85				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	I_R			0.5 50		0.5 20				mA	
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$					28 88					$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150						$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150									$^\circ\text{C}$

NOTES :

1. Pulse Test with $PW = 300\mu\text{sec}$, 1% Duty Cycle.
2. Mounted on P.C. Board with 5mm^2 (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

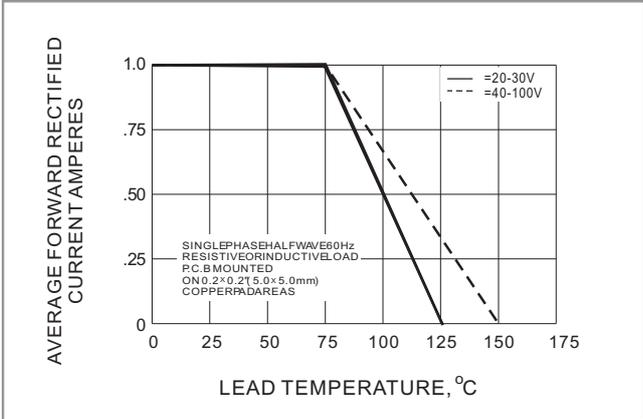


Fig.1 FORWARD CURRENT DERATING CURVE

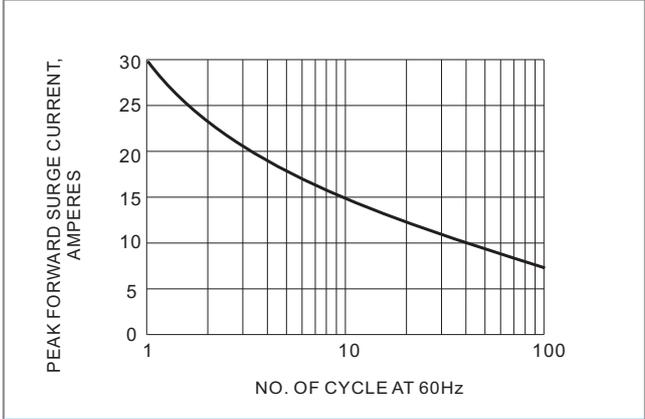


Fig.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

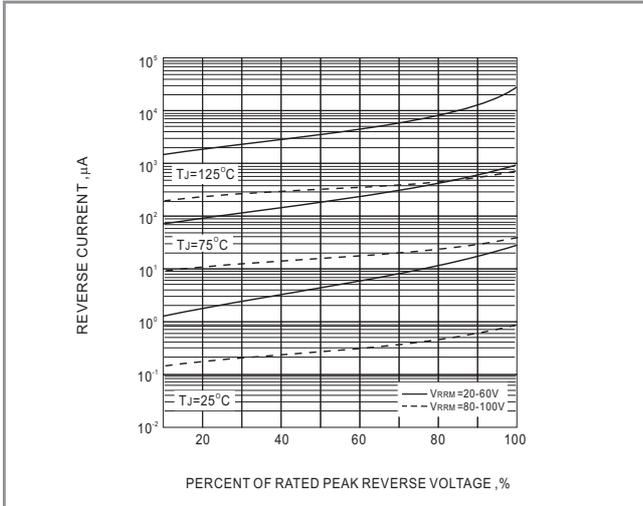


Fig.3 TYPICAL REVERSE CHARACTERISTIC

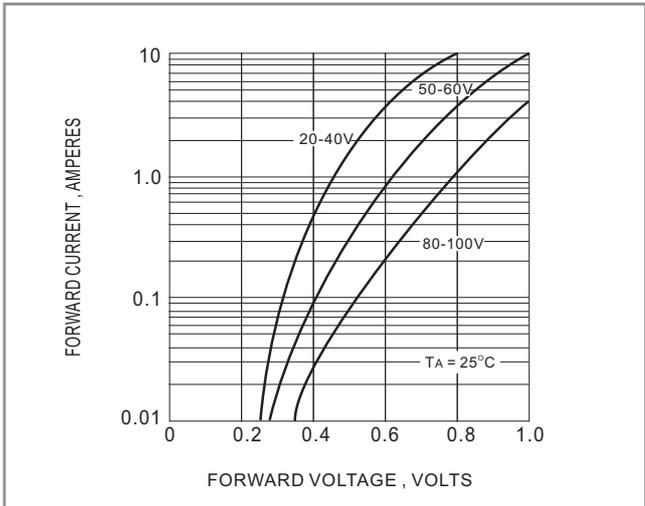


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

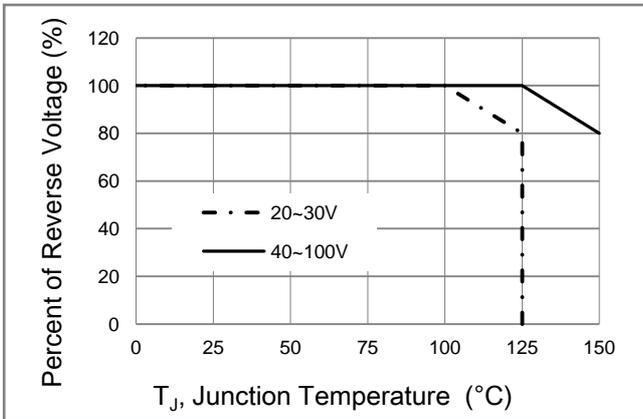


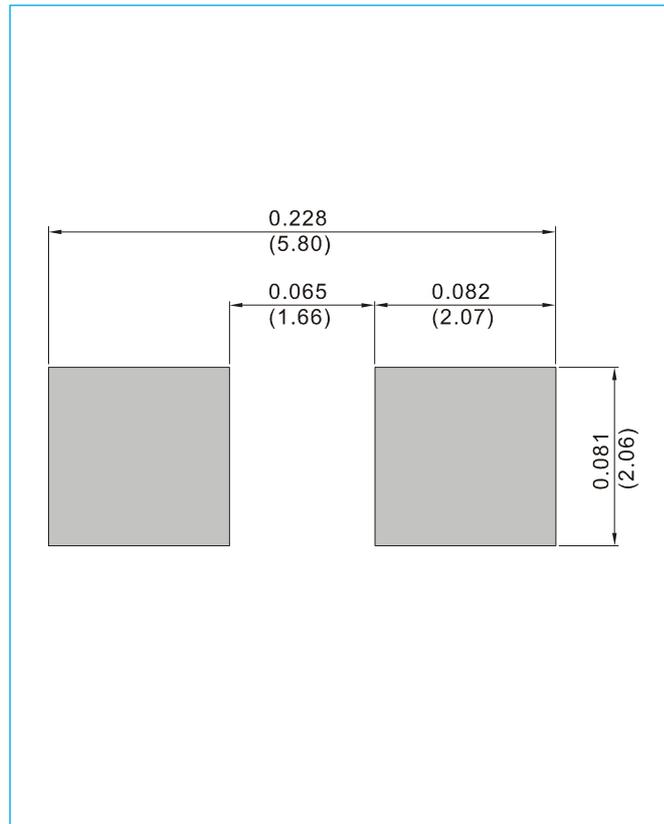
Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT

SMA(W)

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8K per 7" plastic Reel

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