

## **SS12 THRU SS125**

### 1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

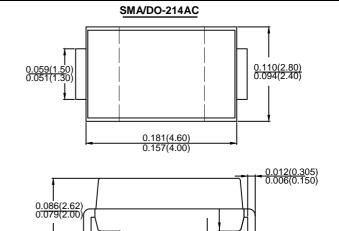
0.060(1.52

#### **Features**

- · Schottky Brrier Chip
- · Low Power Loss, High Efficiency
- · Ideally Suited for Automatic Assembly
- · Surge Overload Rating to 30A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### **Mechanical Data**

- · Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- · Polarity: Color band denotes cathode end
- Mounting Position: Any
- · Making: Type Number



Dimensions in inches and (millimeters)

0.008(0.203) 0.002(0.051)

### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SS12	SS13	SS14	SS145	SS15	SS16	SS18	SS110	SS115	SS120	SS125	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	150	200	250	٧
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	31	35	42	56	70	105	140	175	٧
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	45	50	60	80	100	150	200	250	>
Average Rectified Output Current @T∟ =100 °C	IF(AV)	1.0									Α		
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ггэм	30										Α	
Rating for fusing (t<8.3ms)	l²t	3.74											$A^2 s$
Forward Voltage @IF=1.0A (Note 1)	V <sub>FM</sub>	0.55			0	.7	(	0.85	0.	92	0.95	V	
Peak Reverse Current @TA =25°C		0.1 0.05										mA	
At Rated DC Blocking Voltage @TA =100°C	• I <sub>R</sub>	10 5											
Typical Junction Capacitance	Сл	28											pF
Typical Thermal Resistance per leg (Note 2)	Re JL	88											$^{\circ}$ C/W
Operating Temperature Range	TJ	-55 to+150											$^{\circ}$ C
Storage Temperature Range	Tstg	-55 to +150										$^{\circ}$ C	

Note: 1.Pulse Test with PW=300usec,1%Duty Cycle.

2. Mounted on P.C. Board with 5.0 mm<sup>2</sup> (0.13mm thick) copper pad areas.



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Fig. 1 Forward Current Derating Curve

1.0

0.5

25

50

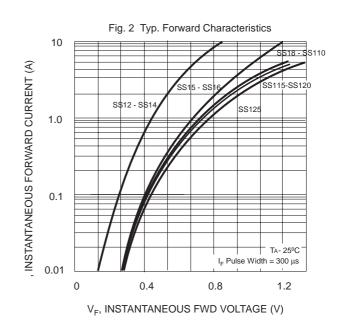
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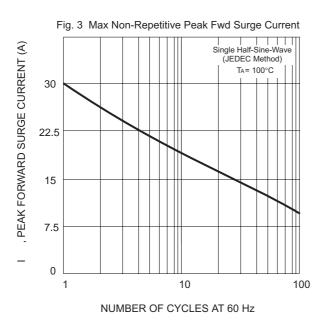
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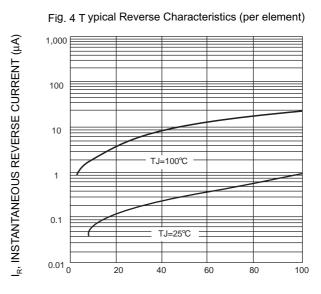
125

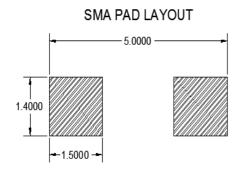
150

Lead Temperature (°C)









PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



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