

SS12~S100

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volts **CURRENT** 1.0 Ampere

SMA/DO-214AC

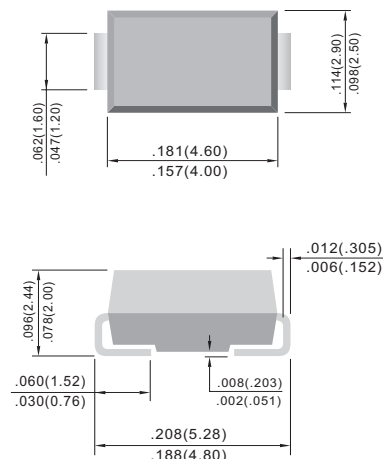
Unit: inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	S100	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current .375"(9.5mm) lead length at T _L =75°C	I _{F(AV)}	1.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A (Note 1)	V _F	0.5			0.7		0.85		V
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking Voltage T _J =100°C	I _R	0.5 50					0.5 20		mA
Maximum Thermal Resistance (Note 2)	R _{θJL} R _{θJA}	28 88							°C / W
Operating Junction Temperature Range	T _J	-55 to +125					-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:

A. Pulse Test with $PW=300\mu\text{sec}$, 1% Duty Cycle.

B. Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

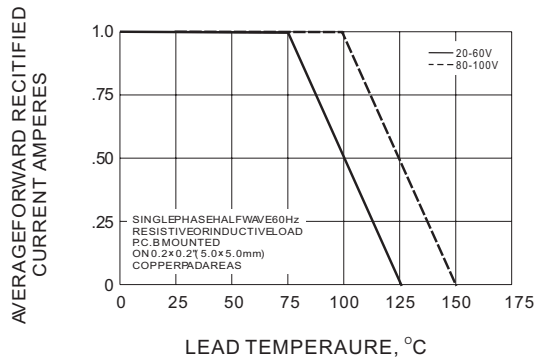


Fig.1- FORWARD CURRENT DERATING CURVE

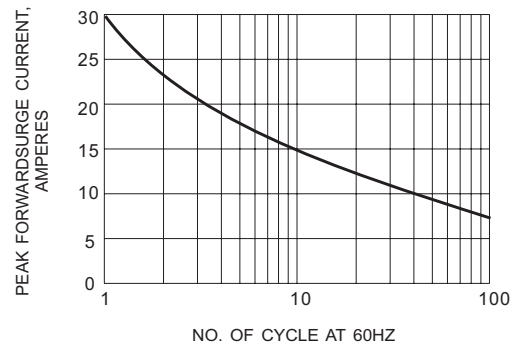


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

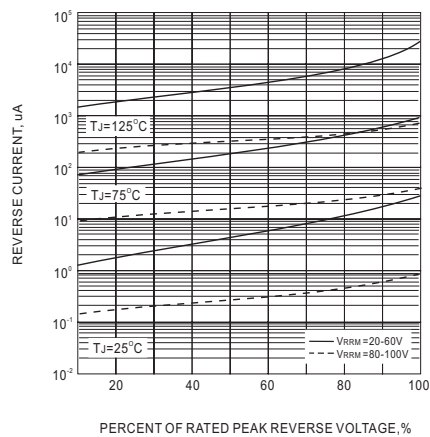


Fig.3- TYPICAL REVERSE CHARACTERISTIC

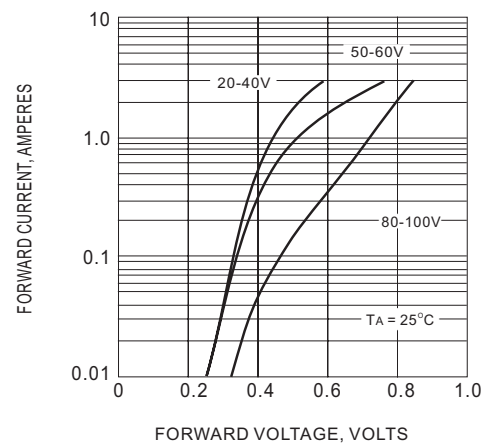


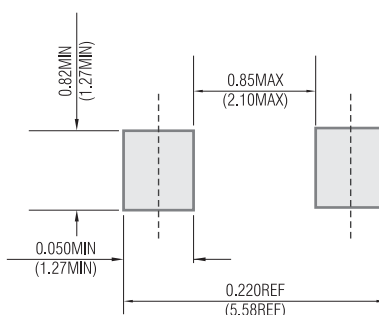
Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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MOUNTING PAD LAYOUT

SMA/DO-214AC

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 7.5K per 13" plastic Reel

T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT

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