

SS12E~SS16E

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 60 Volts **CURRENT** 1.0 Amperes

SMA / DO-214AC

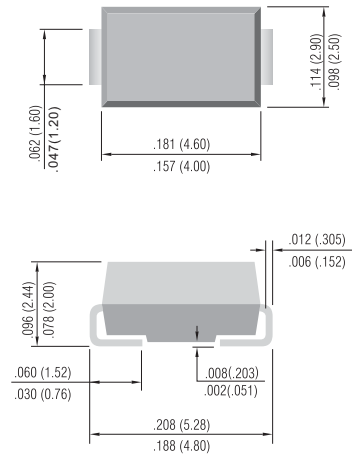
Unit: inch (mm)

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
- ESD Passed devices : Air mode 15KV ,human body mode 8KV

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: 0.0023 ounce, 0.0679 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SS12E	SS13E	SS14E	SS15E	SS16E	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Current 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		V
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking Voltage T _J =100°C	I _R	0.2 50			0.1 20		mA
Typical 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:

- 1.Pulse Test with PW =300μsec, 1% Duty Cycle.
- 2.Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

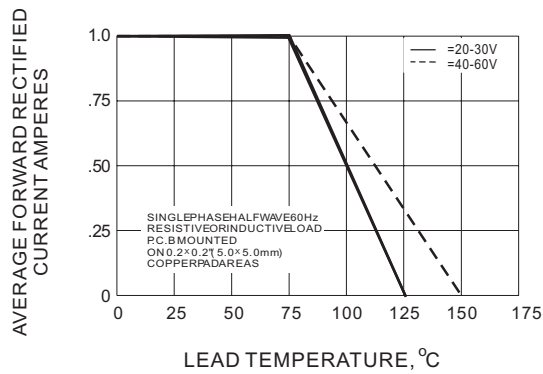


Fig.1-FORWARD CURRENT DERATING CURVE

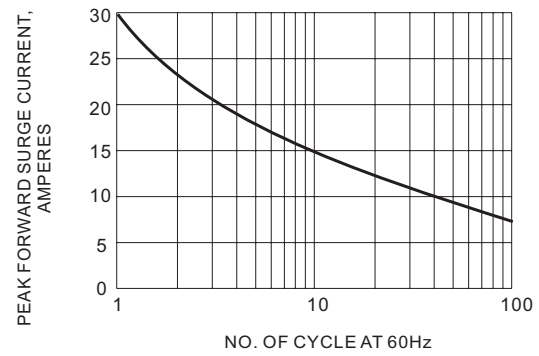


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

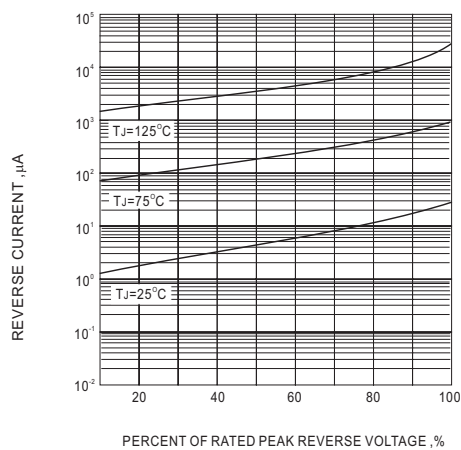


Fig.3-TYPICAL REVERSE CHARACTERISTIC

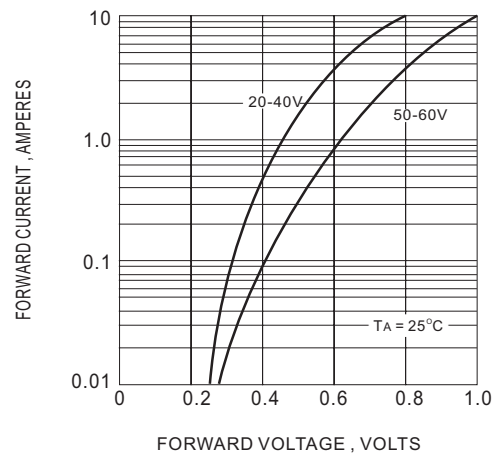
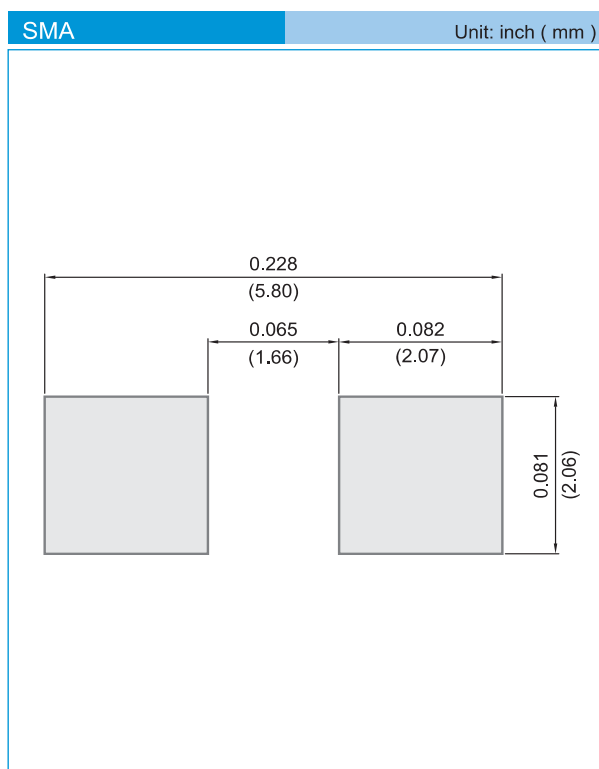


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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MOUNTING PAD LAYOUT



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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