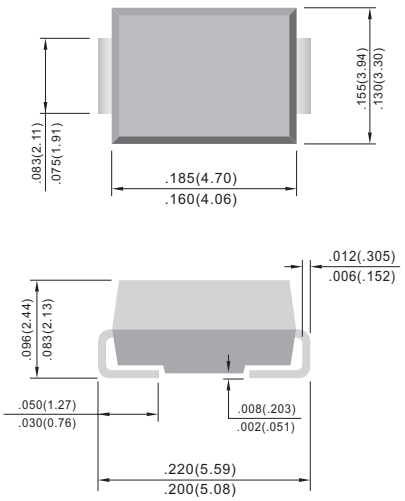
S1A~S1M

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

SMB/DO-214AA Unit: inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Glass passivated junction
- Complete device submersible temperature of 260°C for 10 seconds in solder bath
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.003 ounce, 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase , half wave ,60Hz, resistive or inductive load.
For capacitive load , derate current by 20%.

PARAMETER	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_L=100 °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	V_F	1.1							V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=125°C	I_R	5.0 50							uA
Typical Junction capacitance (Note 1)	C_J	12							pF
Typical Junction Resistance(Note 2)	$R_{\theta JL}$	30							°C / W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 TO +150							°C

NOTES:
1. Measured at 1.0 Mhz and Applied Vr = 4.0 volts.
2. 8.0mm^2 (.013 mm thick) land areas.

S1A~S1M

RATING AND CHARACTERISTIC CURVES

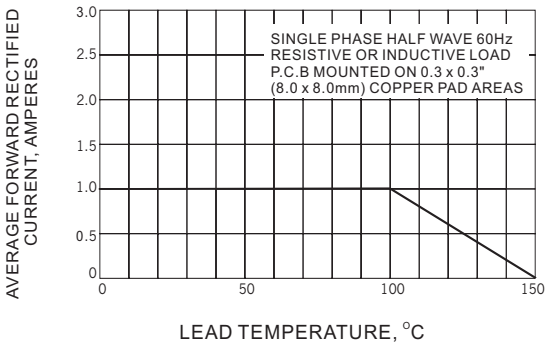


Fig.1 FORWARD CURRENT DERATING CURVE

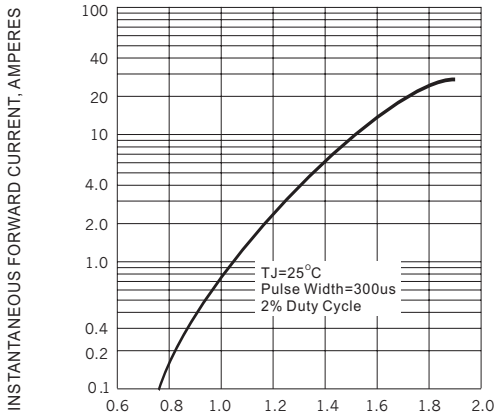


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

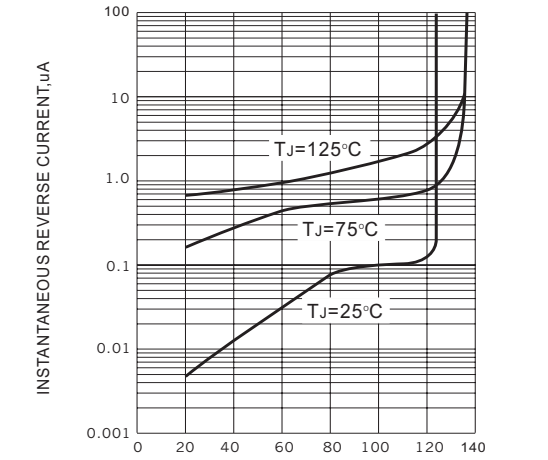


Fig.3 TYPICAL REVERSE CHARACTERISTICS

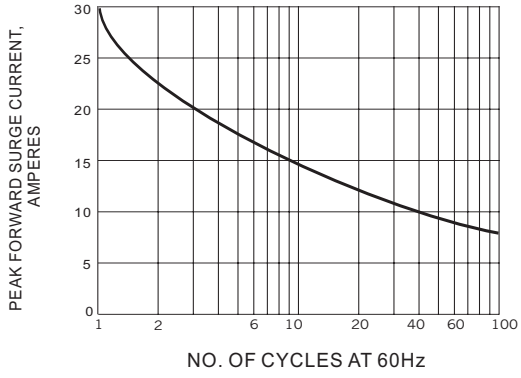


Fig.4 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

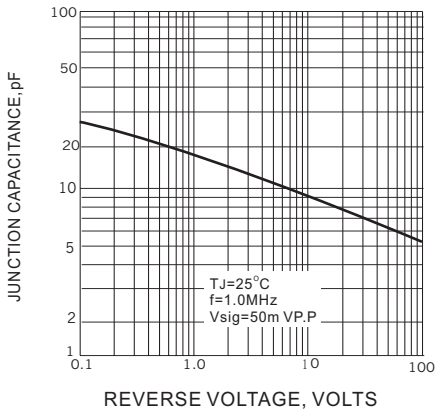
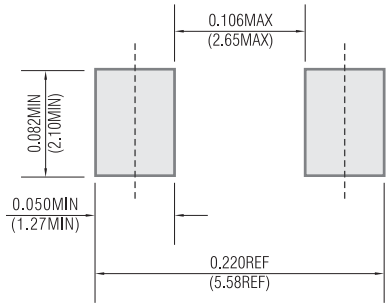


Fig.5 TYPICAL JUNCTION CAPACITANCE

S1A~S1M

MOUNTING PAD LAYOUT

SMB/DO-214AA Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT