



1.DATA SHEET

S2A~S2M

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 2.0 Amperes

SMB/DO-214AA

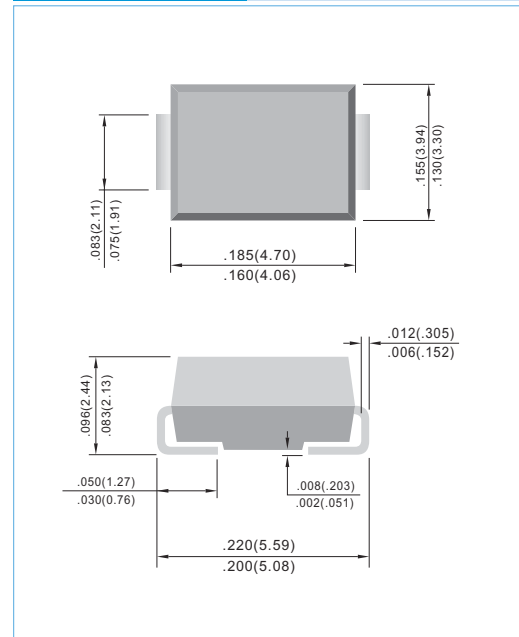
Unit: inch (mm)

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
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

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	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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 $T_L=110^{\circ}C$	I_{AV}	2.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							A
Maximum Forward Voltage at 2.0A	V_F	1.1							V
Maximum DC Reverse Current at $T_A=25^{\circ}C$ Rated DC Blocking Voltage $T_A=125^{\circ}C$	I_R	5.0 125							μA
Maximum Junction capacitance (Note 1)	C_J	30							pF
Typical Junction Resistance (Note 2)	$R_{\theta JL}$	16							$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +150							$^{\circ}C$

NOTES:

- 1.Measured at 1.0 MHZ and applied $V_r=4.0$ volts.
- 2.8.0mm²(.013mm thick)land areas.



RATING AND CHARACTERISTIC CURVES

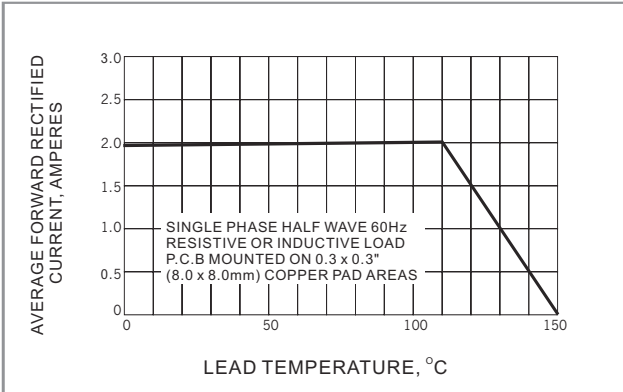


Fig.1 FORWARD CURRENT DERATING CURVE

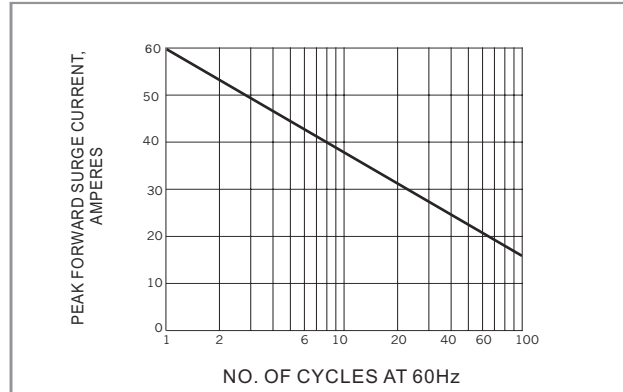


Fig.2 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

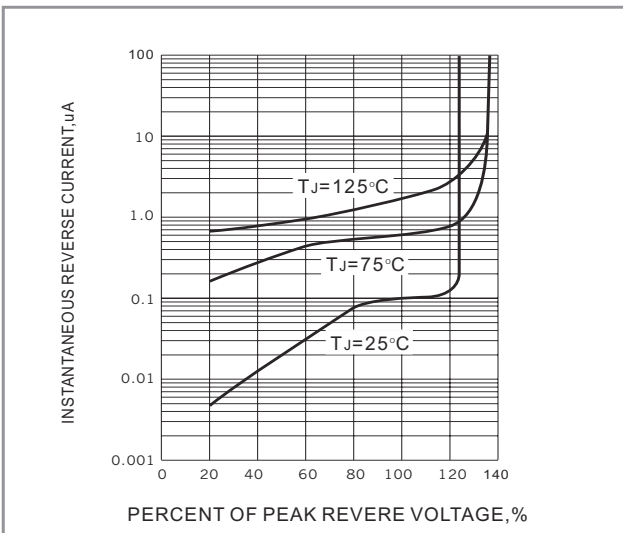


Fig.3 TYPICAL REVERSE CHARACTERISTICS

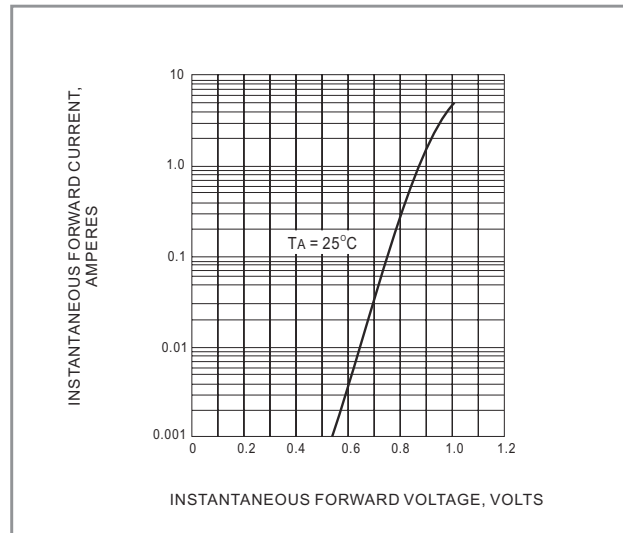


FIG.4 TYPICAL FORWARD CHARACTERISTICS

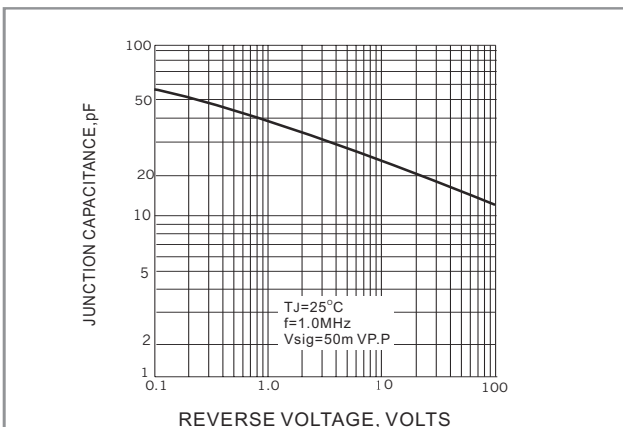


Fig.5 TYPICAL JUNCTION CAPACITANCE