

S3A~S3M

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 3.0 Amperes

SMC / DO-214AB

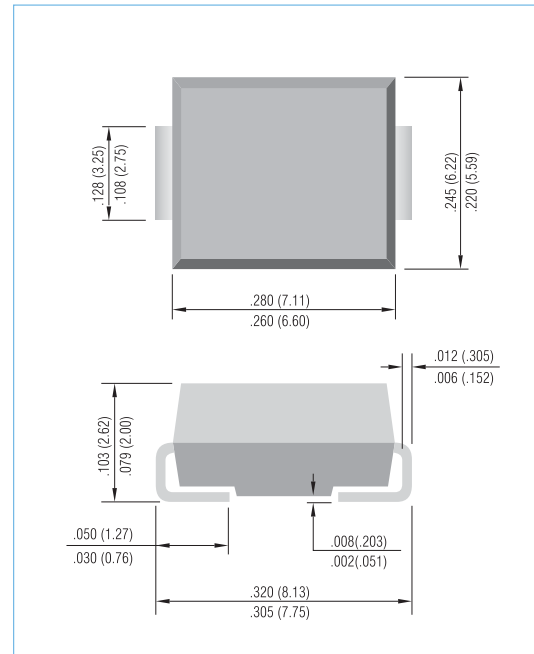
Unit: inch (mm)

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 iunction
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.007 ounce, 0.21 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	S3A	S3B	S3D	S3G	S3J	S3K	S3M	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 Rectified Current at $T_L = 75^{\circ}\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100							A
Maximum Forward Voltage at 3.0A	V_F	1.2							V
Maximum DC Reverse Current at $T_j=25^{\circ}\text{C}$ Rated DC Blocking Voltage $T_j=125^{\circ}\text{C}$	I_R	1.0 250							μA
Maximum Junction capacitance (Note 1)	C_J	53							pF
Typical Junction Resistance(Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	13 47							$^{\circ}\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

NOTES:

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

S3A~S3M

RATING AND CHARACTERISTIC CURVES

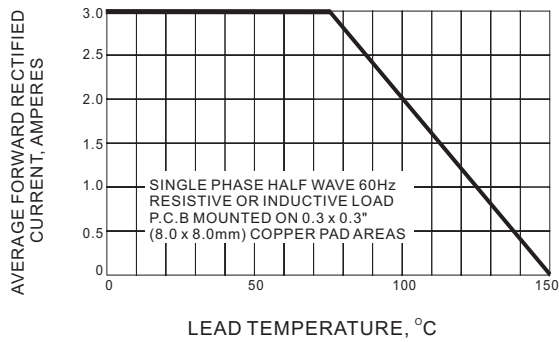


Fig.1 FORWARD CURRENT DERATING CURVE

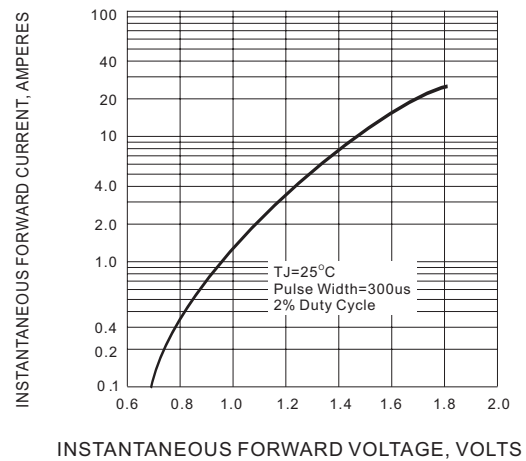


Fig.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

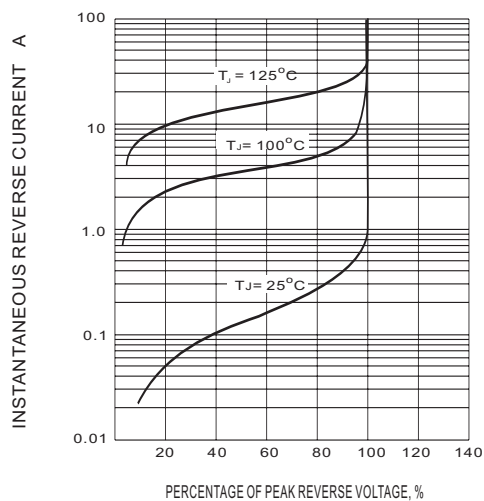


Fig.3-TYPICAL REVERSE CHARACTERISTIC

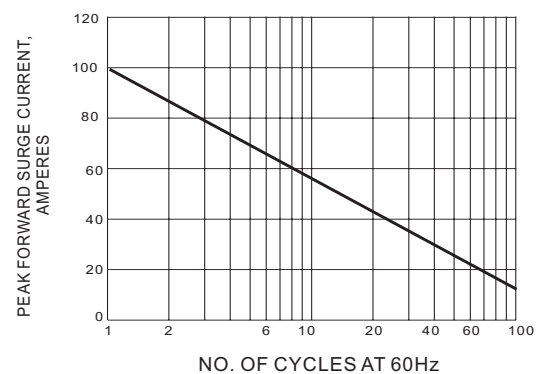


Fig.4 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

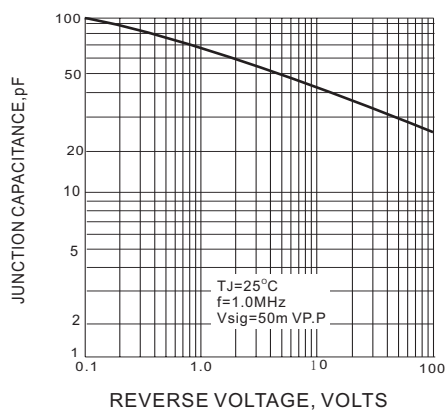
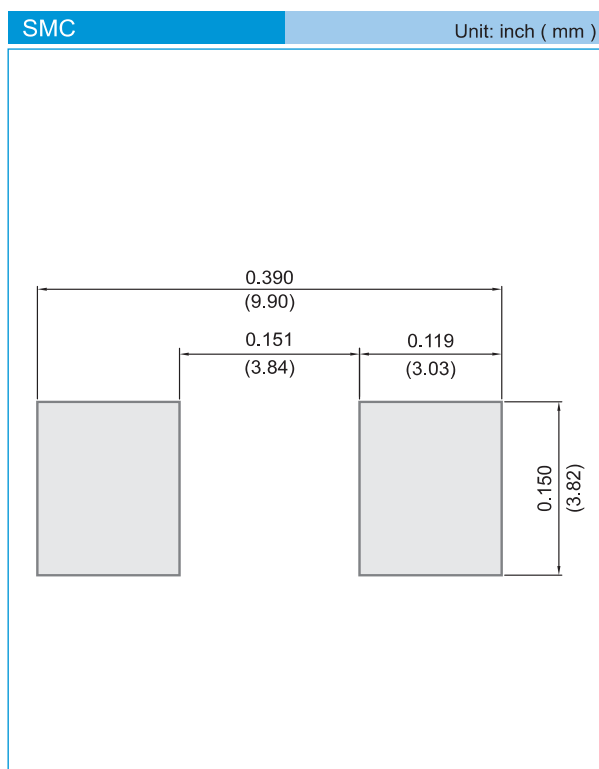


Fig.5 TYPICAL JUNCTION CAPACITANCE

S3A~S3M

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.