

S1A THRU S1M

SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER
 Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

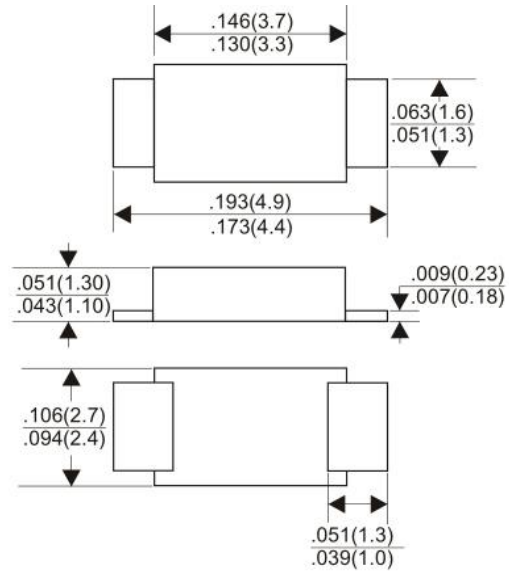
FEATURES

- ◆ Ideal for surface mount applications
- ◆ Easy pick and place
- ◆ Built-in strain relief
- ◆ High surge current capability

Mechanical Data

- ◆ Case: Molded plastic
- ◆ Epoxy: UL 94V-0n rate flame retardant
- ◆ Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting position: Any

SMAF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Catalog Number	SYMBOLS	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum Average Forward Rectified Current 375"(9.5mm) Lead Length At $T_A = 75^\circ C$	$I_{(AV)}$	1							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L = 90^\circ C$	I_{FSM}	30							Amps
Maximum instantaneous forward voltage per at 1.0A	V_F	1.0							VOLTS
Maximum DC Reverse Current at $T_A = 25^\circ C$	I_R	5							uA
Rated DC Blocking Voltage at $T_A = 100^\circ C$		50							
Typical Junction Capacitance (Note 1)	C_J	9							pF
Typical Thermal Resistance R_{qJA} (Note 2)	R_{qJL}	110							$^\circ C/W$
Operating and Storage Temperature Rang	T_J, T_{STG}	-55 to +150							$^\circ C$

Note: 1. Measured at 1MHZ and applied reverse voltage of 4.0VD.C.

2. Thermal resistance from junction to ambient.

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RATING AND CHARACTERISTIC CURVES S1A THRU S1M

FIG.1-TYPICAL FORWARD CHARACTERISTICS

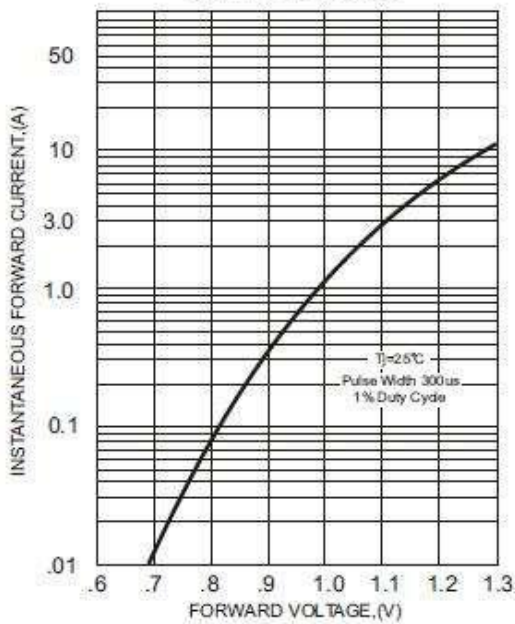


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

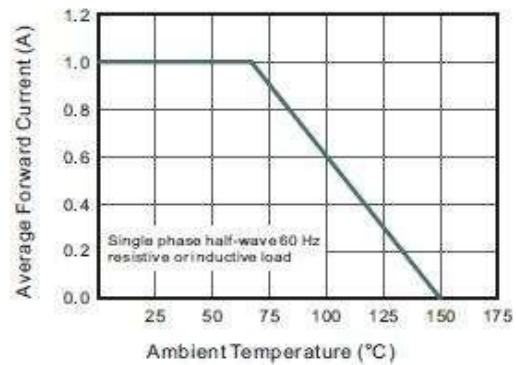


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

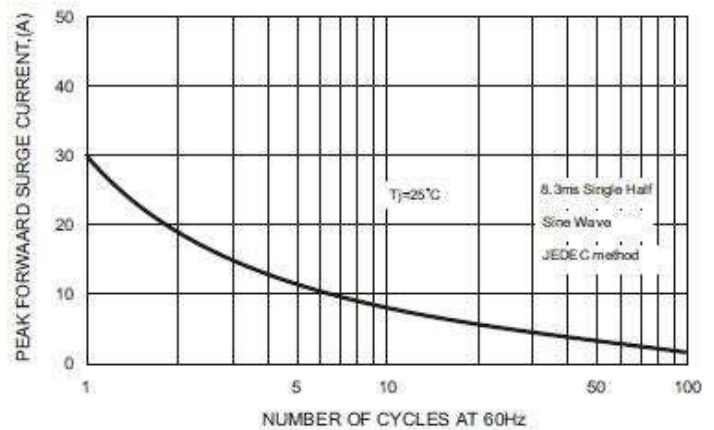


FIG.3 - TYPICAL REVERSE

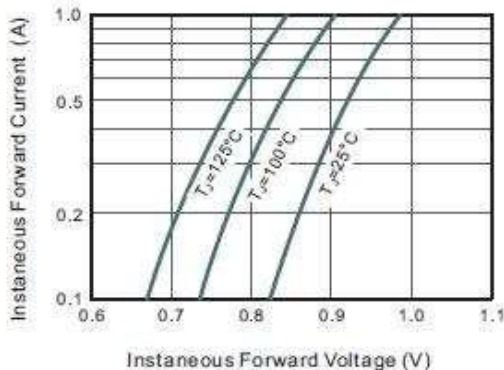
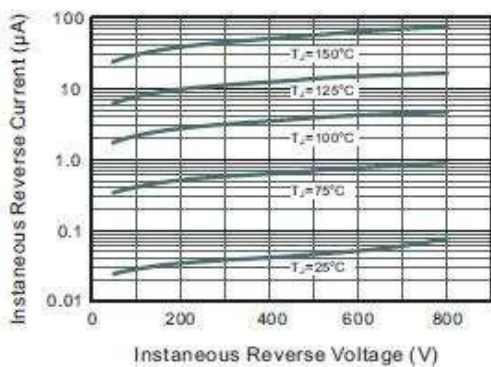
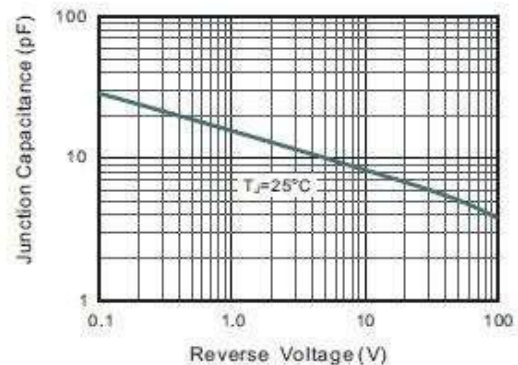


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.