

S2A THRU S2M

SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER
Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Ampere

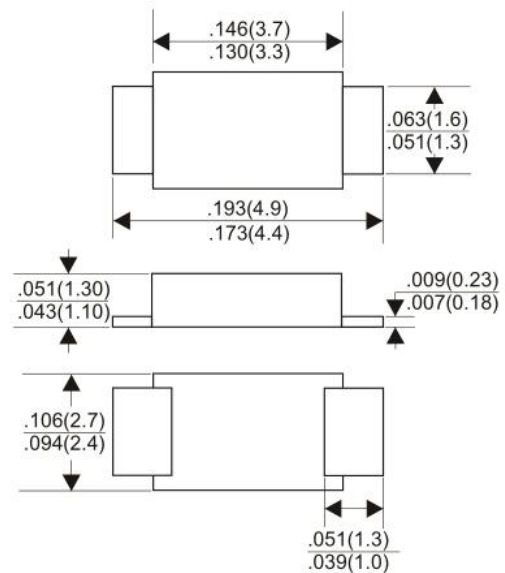
FEATURES

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Glass Passivated Chip Junction
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data

- ◆ Case: SMAF
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 27mg 0.00095oz

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%

PARAMETER	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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 At $T_A = 65^\circ\text{C}$	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	55							Amps
Maximum instantaneous forward voltage per at 2.0A	V_F	1.1							VOLTS
Maximum DC Reverse Current at Rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$							uA
		$T_A = 125^\circ\text{C}$							
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	30							pF
Typical Thermal Resistance	$R_{\theta JA}$	85							°C/W
Operating Junction Temperature	T_J	-55 to +150							°C
Storage Temperature Rang	T_{STG}	-55 to +150							°C

Note: 1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with $0.2 \times 0.2''$ ($5.0 \times 5.0\text{mm}$) copper pad areas.

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RATING AND CHARACTERISTIC CURVES S2A THRU S2M

Fig.1 Forward Current Derating Curve

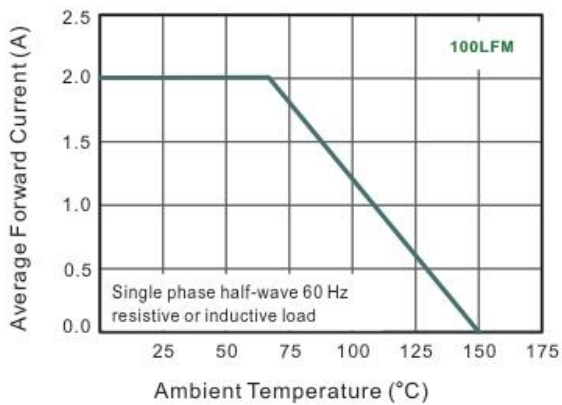


Fig.2 Typical Instantaneous Reverse Characteristics

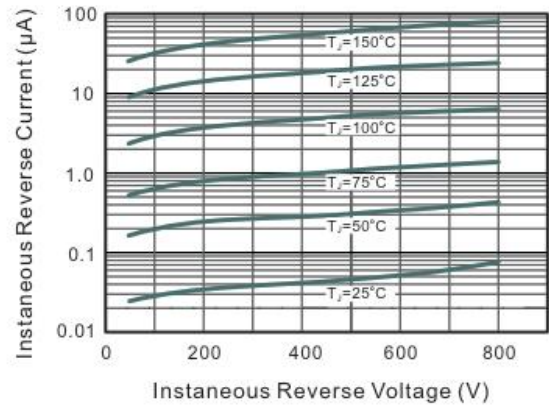


Fig.3 Typical Forward Characteristic

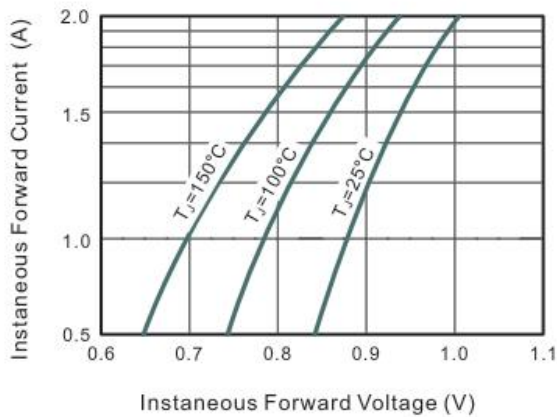


Fig.4 Typical Junction Capacitance

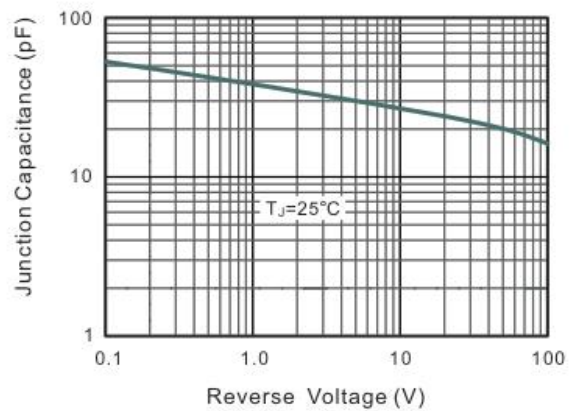
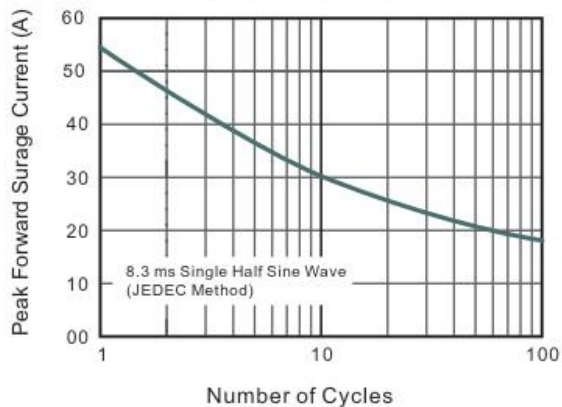


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



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