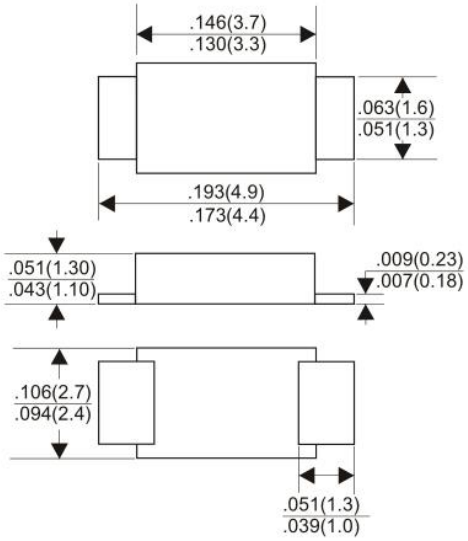
SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

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

SMAF



Dimensions in inches and (millimeters)

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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℃		$I_{(AV)}$	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	T_A=25℃	I_R	5.0							uA
	T_A=125℃		100							
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							℃/W
Operating Junction Temperature		T_J	-55 to +150							℃
Storage Temperature Rang		T_{STG}	-55 to +150							℃

1- Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.2 × 0.2″ (5.0 × 5.0mm) copper pad areas.

Kingtronics®

S2A THRU S2M

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

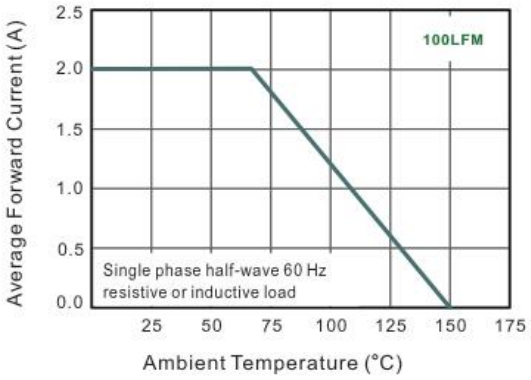


Fig.2 Typical Instaneous Reverse Characteristics

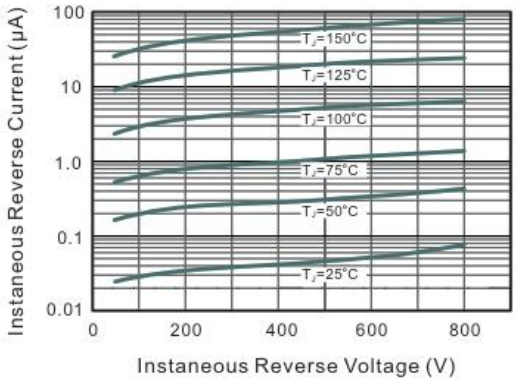


Fig.3 Typical Forward Characteristic

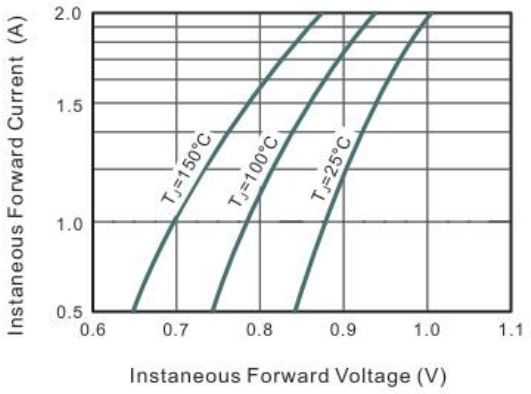


Fig.4 Typical Junction Capacitance

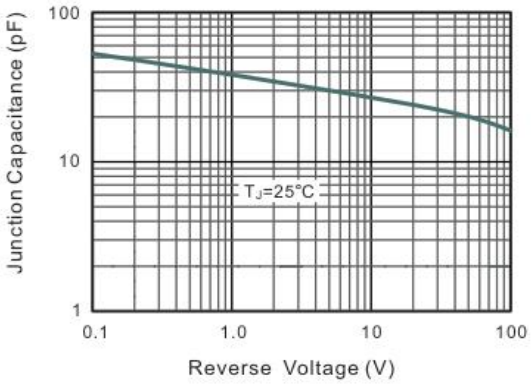
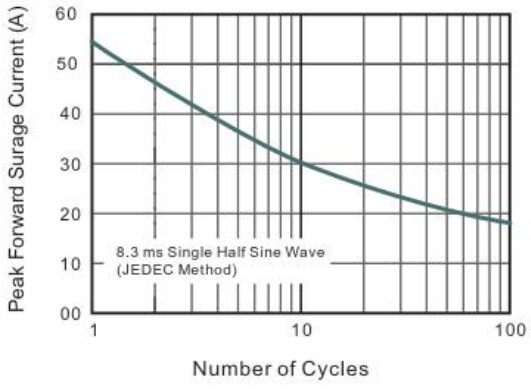


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current



Note: Specifications are subject to change without notice.