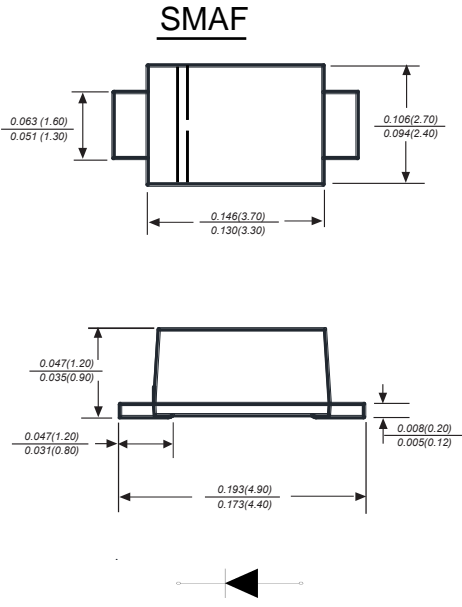


SURFACE MOUNT GENERAL RECTIFIER	Reverse Voltage - 50 to 1000Volts Forward Current - 20 Ampere
<p style="text-align: center;">SMAF</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>	<p>Features</p> <ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ Idea for printed circuit board ◆ Open Junction chip ◆ Low reverse leakage ◆ High forward surge current capability ◆ High temperature soldering guaranteed 250 C/10 seconds at terminals <p>Mechanical Data</p> <p>Case: SMAF molded plastic body Terminals: Solderable per MIL-STD-750, Method 2026 Polarity: Polarity symbol marking on body Mounting Position: Any Weight : 0.0018 ounce, 0.064 grams</p>

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 current derate by 20%.

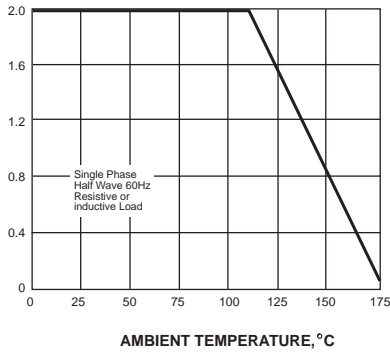
Parameter	SYMBOLS	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	UNITS
Marking Code		S2A	S2B	S2D	S2G	S2J	S2K	S2M	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL=75 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 instantaneous forward voltage at 2.0A	V _F	1.10							V
Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=125°C	I _R	5.0 50							uA
Typical junction capacitance (NOTE 1)	C _J	30.0							pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

Typical Characteristics

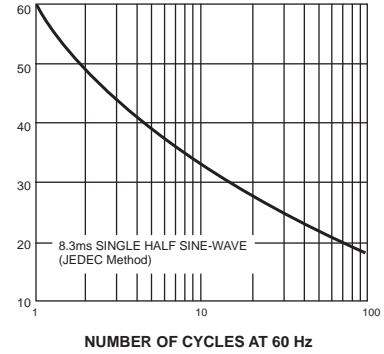
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



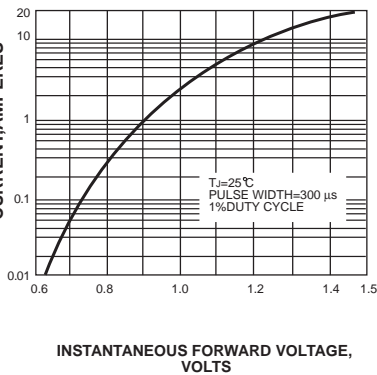
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



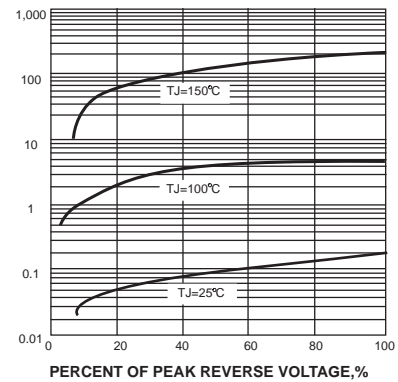
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



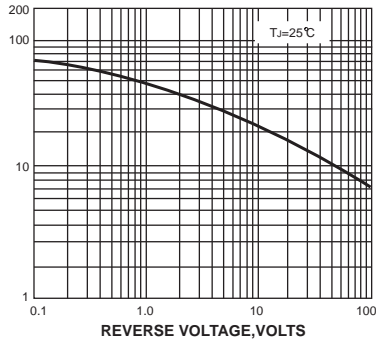
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

