

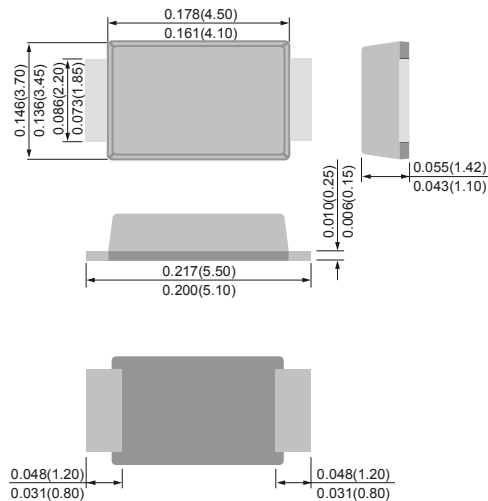
S2AF~S2MF

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT 2.0 Amperes

SMBF

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 junction
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: JEDEC SMBF molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Indicated by cathode band

Standard packaging: 12mm tape (EIA-481)

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	S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	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 Current at $T_L=100^{\circ}C$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	60							A
Maximum Forward Voltage at 2.0A	V_F	1.1							V
Maximum DC Reverse Current at $T_J=25^{\circ}C$ Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	5.0 125							uA
Typical Junction capacitance (Note 1)	C_J	30							pF
Typical Junction Resistance(Note 2)	$R_{\theta JL}$	16							$^{\circ}C / W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 TO +150							$^{\circ}C$

NOTES:

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

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RATING AND CHARACTERISTIC CURVES

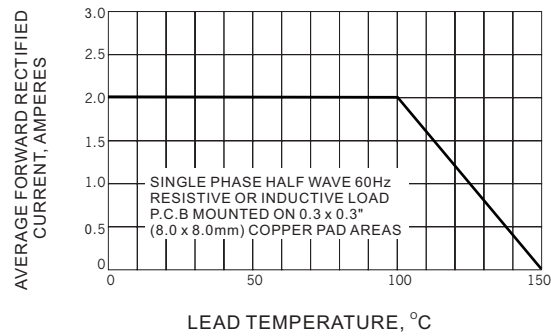


Fig.1 FORWARD CURRENT DERATING CURVE

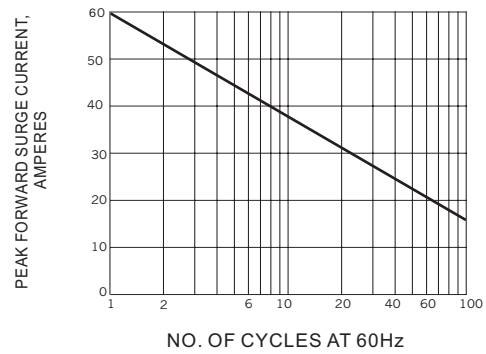


Fig.2 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

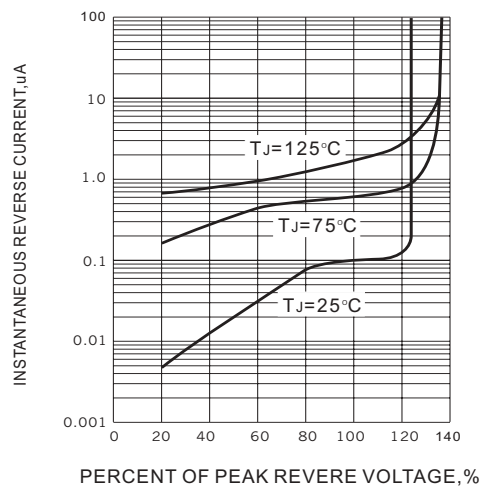


Fig.3 TYPICAL REVERSE CHARACTERISTICS

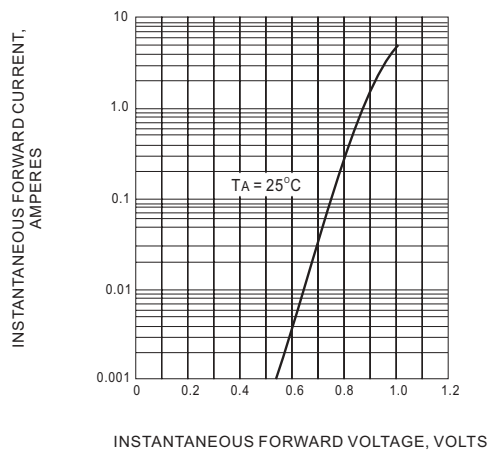


FIG.4 TYPICAL FORWARD CHARACTERISTICS

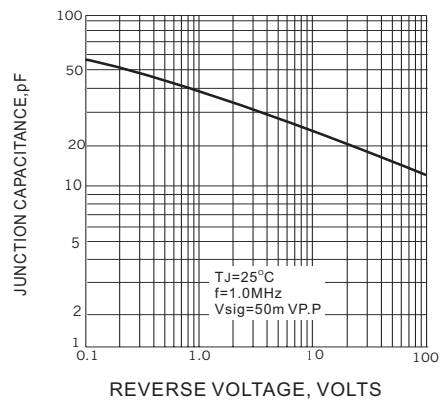


Fig.5 TYPICAL JUNCTION CAPACITANCE