

S2MF

2.0AMPS. GLASS PASSIVATED SURFACE MOUNT RECTIFIERS

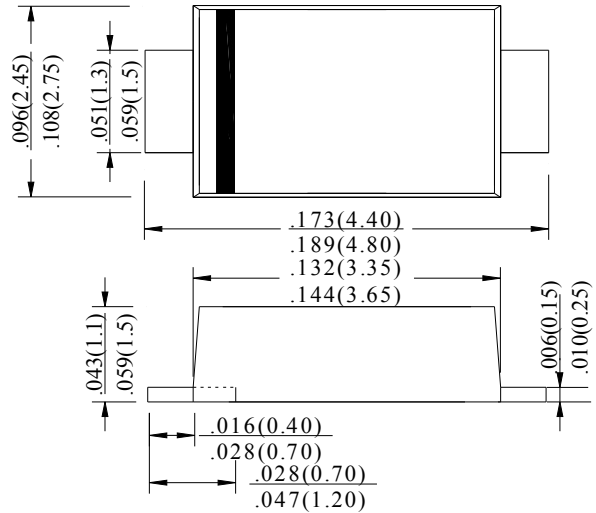
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High temperature soldering guaranteed:
260°C/10 seconds at terminals.
- . For surface mounted application
- . Easy pick and place

MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity:Color band denotes cathode end
- . Packaging: 12mm tape per EIA STD RS-481
- . Mounting position: Any

SMF



Dimensions in inches and (millimeters)

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%

Type Number	SYM BOL	S2MF	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current at $T_A = 55^\circ C$	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60.0	A
Maximum Forward Voltage at 2.0A DC	V_F	1.0	V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at rated DC blocking voltage @ $T_A = 125^\circ C$	I_R	5.0 100.0	μA
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	14.94	A ² Sec
Typical Junction Capacitance (Note1)	C_j	30	pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	50	°C/W
Storage Temperature	T_{STG}	-55 to +150	°C
Operation Junction Temperature	T_J	-55 to +150	°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 0.6×0.6”(15.0×15.0mm)Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES (S2MF)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

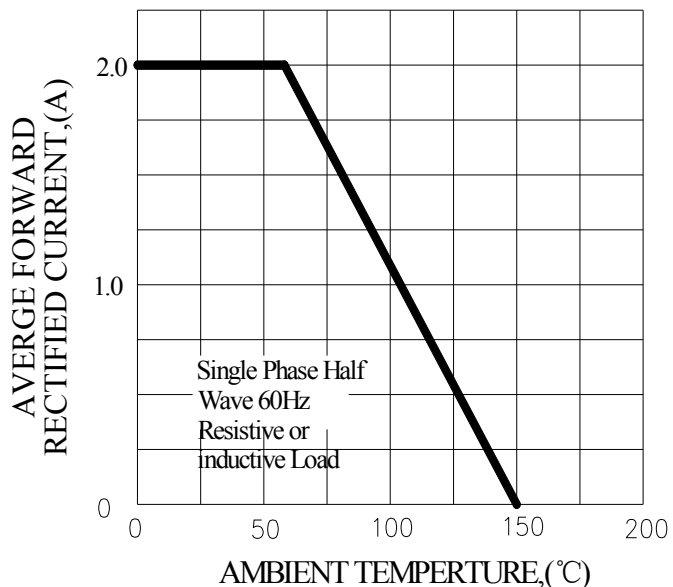


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

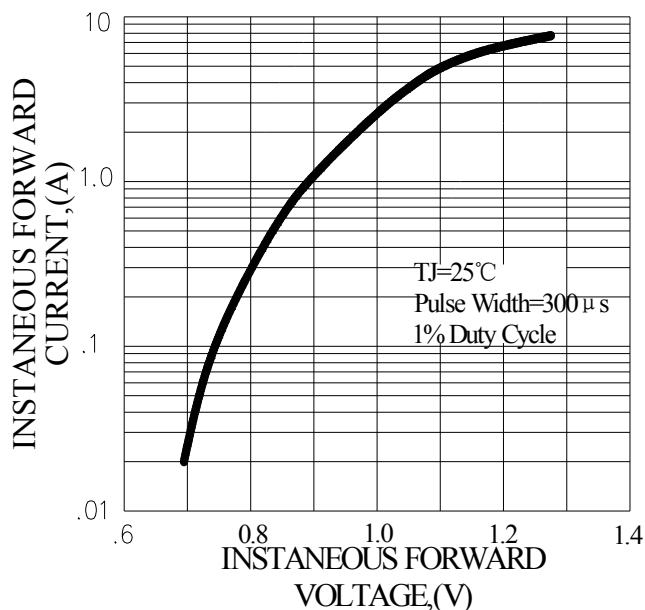


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

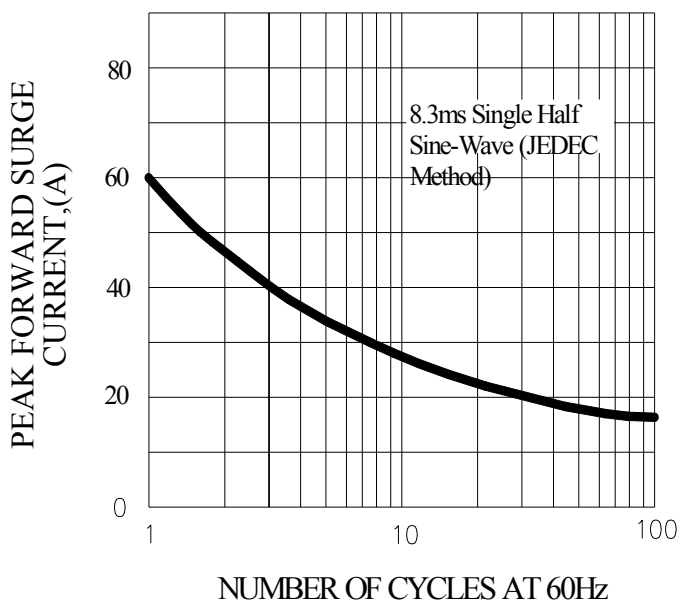


FIG.4-TYPICAL REVERSE CHARACTERISTICS

