



SURFACE MOUNT SILICON RECTIFIER

G1
THRU
G7

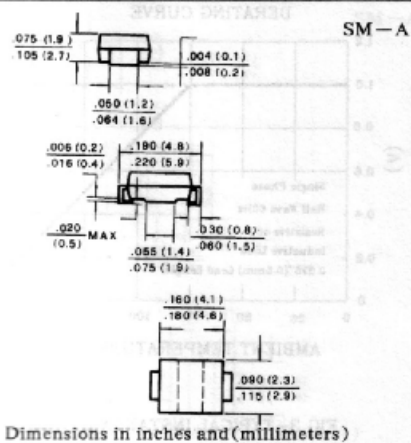
FEATURES

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability.
- High temperature soldering guaranteed,
260°C/10 seconds at terminals.

MECHANICAL DATA

- Case; Transfer molded plastic
- Epoxy; UL94V-0 rate flame retardant.
- Polarity; Color band denotes cathode end.
- Lead; Plated terminals solderable per MIL-STD-202E method 208C
- Weight; 0.002 ounce, 0.057 gram

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere



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%.

	SYMBOLS	G1	G2	G3	G4	G5	G6	G7	UNITS	
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 $T_A=75^{\circ}\text{C}$	$I_{(AV)}$	1.0							Amp	
Peak Forward Surge Current 8.3ms single half sine — wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							Amps	
Maximum Instantaneous Forward Voltage Drop at 1.0A	V_F	1.1							Volts	
Maximum DC Reverse Current at rated DC blocking voltage	$T_C=25^{\circ}\text{C}$	I_R	5.0							μA
	$T_A=125^{\circ}\text{C}$		50							
Maximum Full Load Reverse Current, full cycle average at $T_A=75^{\circ}\text{C}$	$I_{R(AV)}$	30							μA	
Typical Junction Capacitance (Note 1)	C_J	15							pF	
Typical Thermal Resistance (Note 2).	$R_{\theta JA}$	75							$^{\circ}\text{C}/\text{W}$	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							$^{\circ}\text{C}$	

NOTES:

1. Measured at 1.0 MHz and applied average voltage of 4.0 volts.
2. $6.0 \times 6.0 \text{ mm}^2$ copper pads to each terminal.

RATINGS AND CHARACTERISTIC CURVES G1 THRU G7

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

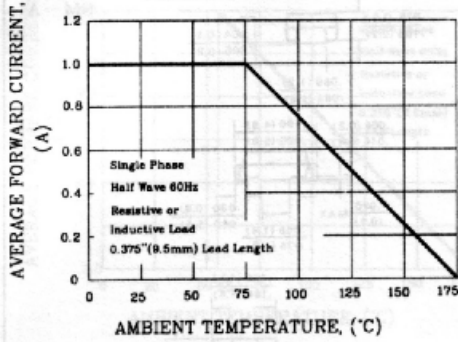


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

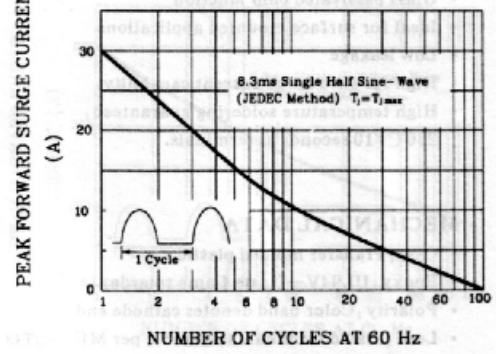


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

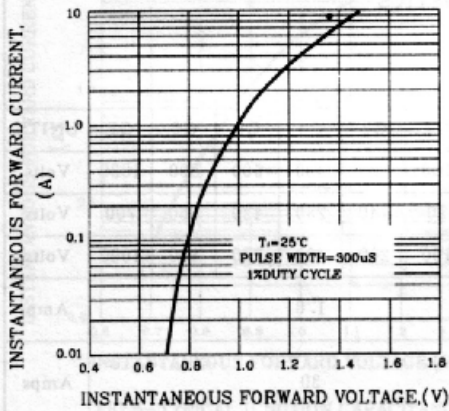


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

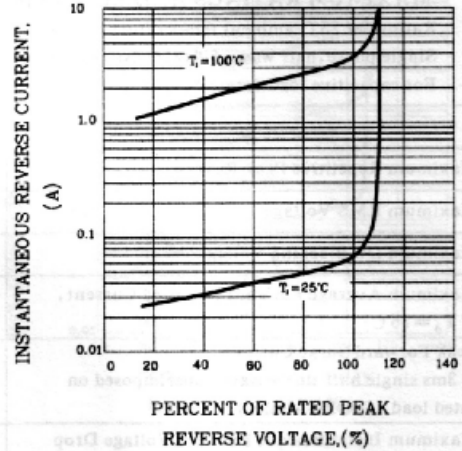


FIG.5-TYPICAL JUNCTION CAPACITANCE

