

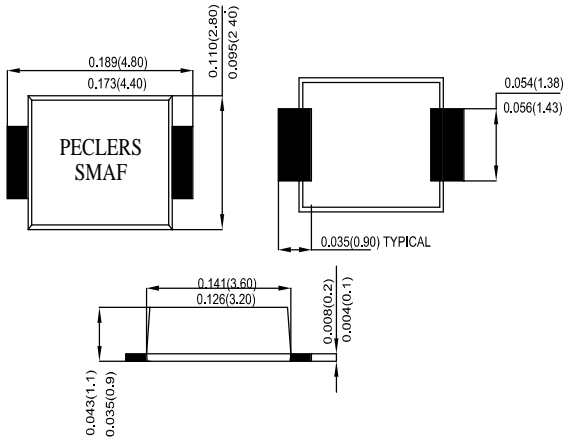
REVERSE VOLTAGE: 50 to 1000 VOLTS  
FORWARD CURRENT: 1.0 AMPERE

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Low forward voltage drop
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

MECHANICAL DATA

Case: Molded plastic, SMAF  
Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed  
Polarity: Color band denotes cathode end  
Packaging: 12mm tape per EIA STD RS-481



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%.

	Symbols	M1	M2	M3	M4	M5	M6	M7	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>L</sub> =75°C	I <sub>(AV)</sub>	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							Amp
Maximum Forward Voltage at 1.0A	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 100							μAmp
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	12							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	28							°C/W
Maximum Reverse Recovery Time (Note 3)	T <sub>RR</sub>	2.5							μS
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150							°C

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal resistance from junction to ambient mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas
- 3- Reverse Recovery Test Conditions: I<sub>F</sub>=.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=.25A.

#### RATINGS AND CHARACTERISTIC CURVES

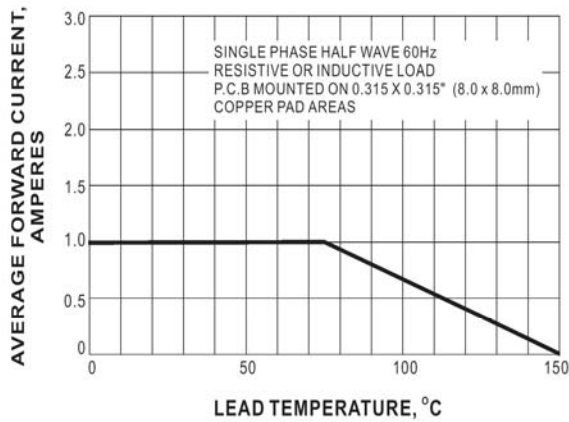


Fig.1-FORWARD CURRENT DERATING CURVE

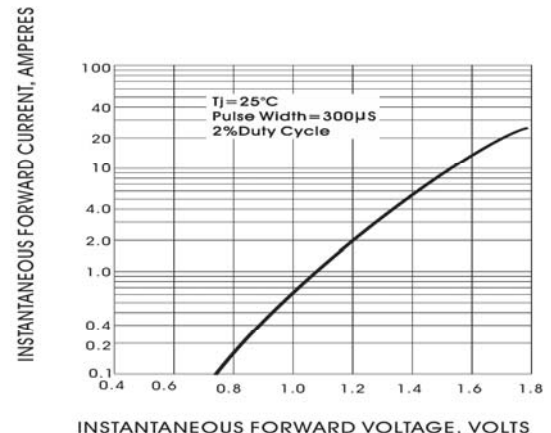


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

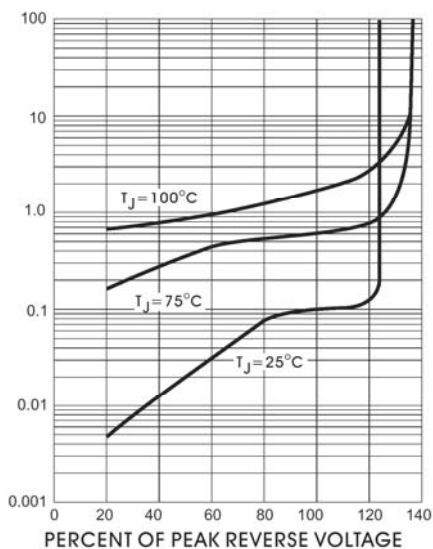


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

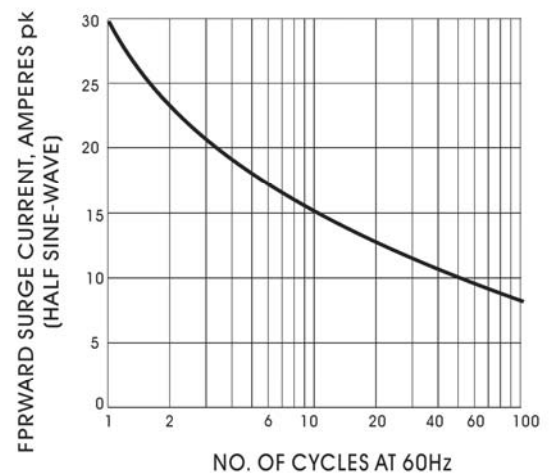


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

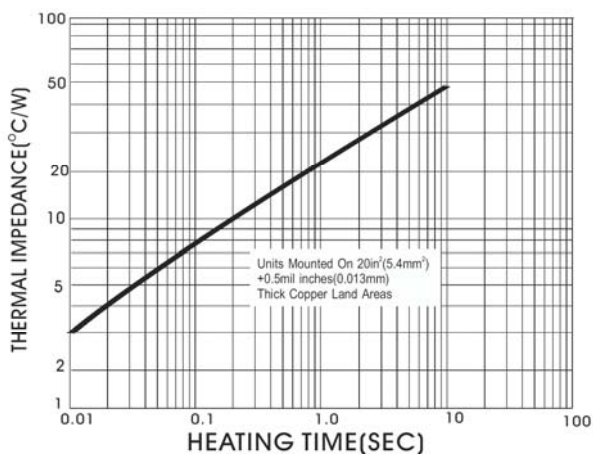


Fig. 5- TRANSIENT THERMAL IMPEDANCE

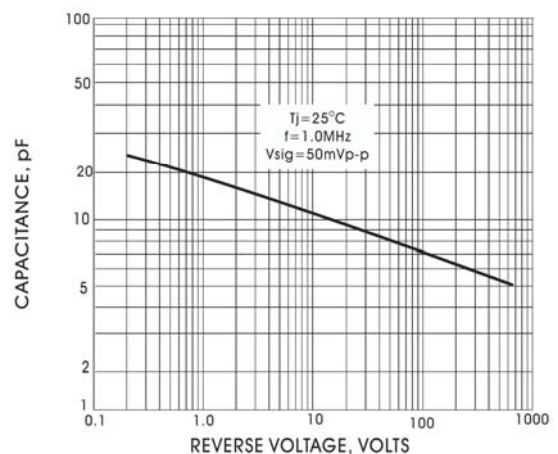


Fig. 6- TYPICAL JUNCTION CAPACITANCE PER ELEMENT