

SM4001 - SM4007

PRV : 50 - 1000 Volts

Io : 1.0 Ampere

FEATURES :

- * Glass Passivated Junction
- * Hight Current Capability
- * Low Forward voltage Drop
- * Hight Reliability and Low Leakage
- * For Surface Mount Application
- * Plastic Material - UL Flammability Classification Rating 94 V-0
- * **Pb / RoHS Free**

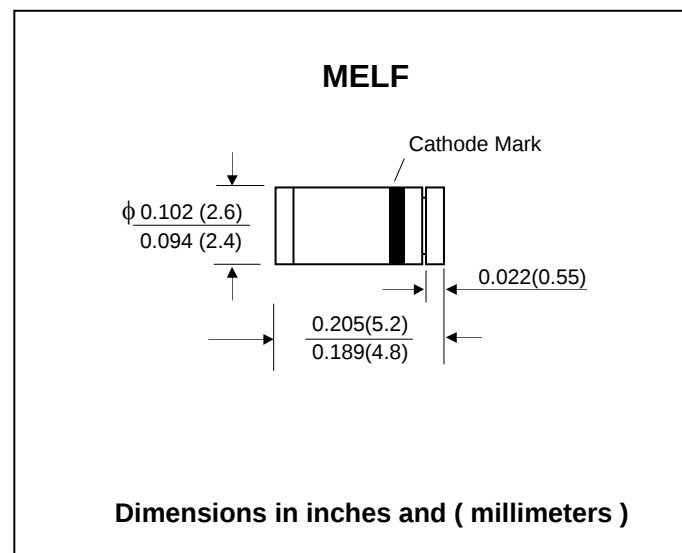
Mechanical Data

- * Case : MELF, Plastic
- * Terminals : Solderable per MIL-STD-202, Method 208
- * Polarity : Color band
- * Approx Weight : 0.25 grams
- * Mounting Position : Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

SURFACE MOUNT GLASS PASSIVATED JUNCTION



RATING	SYMBOL	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at $I_F = 1.0$ A.	V_F	1.1							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	I_R	5.0							μA
		50							μA
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Typical Junction Capacitance (Note1)	C_J	15							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Note :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

RATING AND CHARACTERISTIC CURVES (SM4001 - SM4007)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

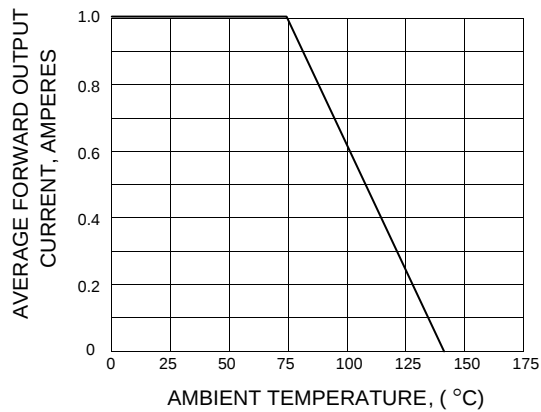


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

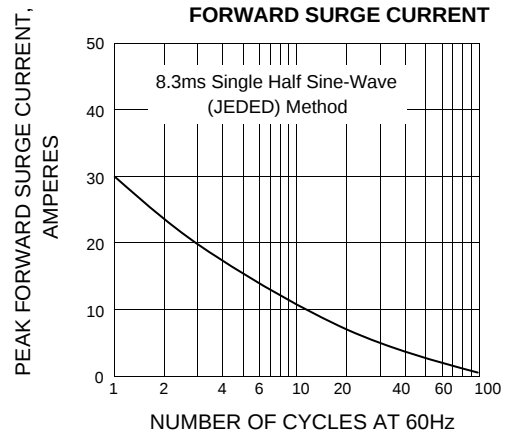


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

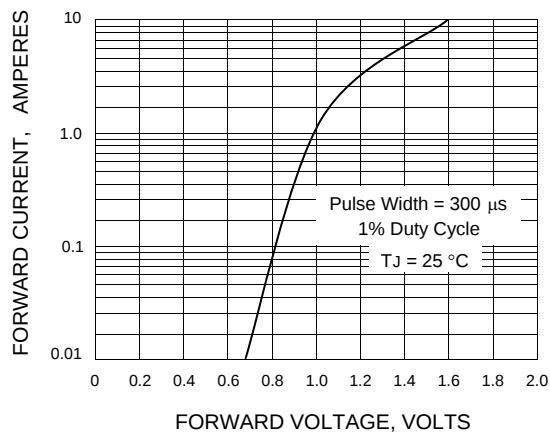


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

