

FEATURES:

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Glass passivated Chip

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

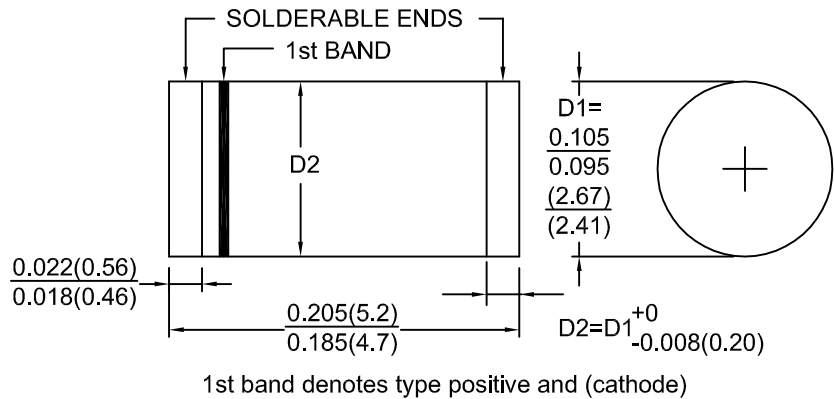
Terminals : Plated terminals, solderable per MIL-STD-202, Method 208 guaranteed

Polarity : Silver color band on body denotes cathode

Mounting Position : Any

Weight : 0.116 grams, 0.0046 ounce

MELF / DO-213AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	SM 4001	SM 4002	SM 4003	SM 4004	SM 4005	SM 4006	SM 4007	Units
Maximum recurrent 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 $T_L=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage drop at 1.0 A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_a=25^\circ\text{C}$ $T_a=125^\circ\text{C}$	I_R	5.0 50.0							μA
Maximum full load reverse current full cycle average at $T_a=75^\circ\text{C}$	I_{RO}	30.0							μA
Typical thermal resistance	R_{th-JA} R_{th-JL}	75 30							$^\circ\text{C/W}$
Typical junction capacitance	C_j	12							pF
Operating junction temperature range	T_j	-65 to +150							$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +150							$^\circ\text{C}$

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

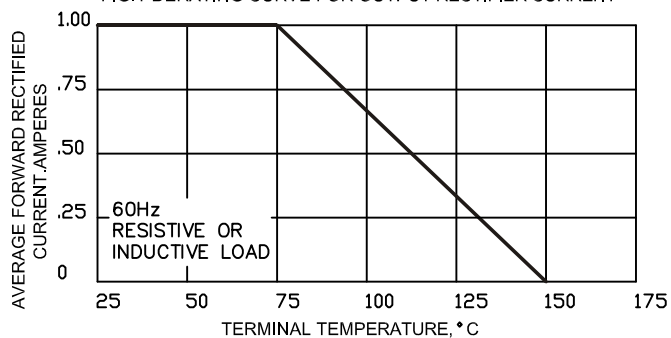


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

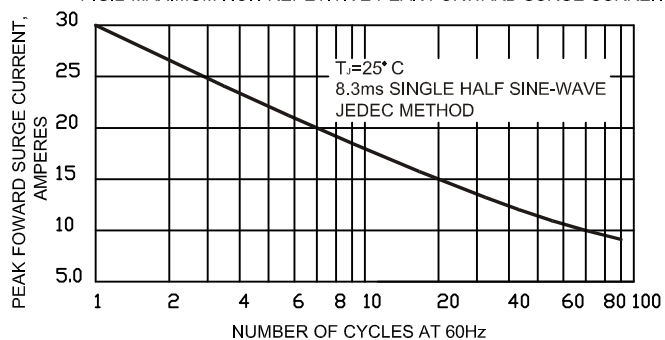


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

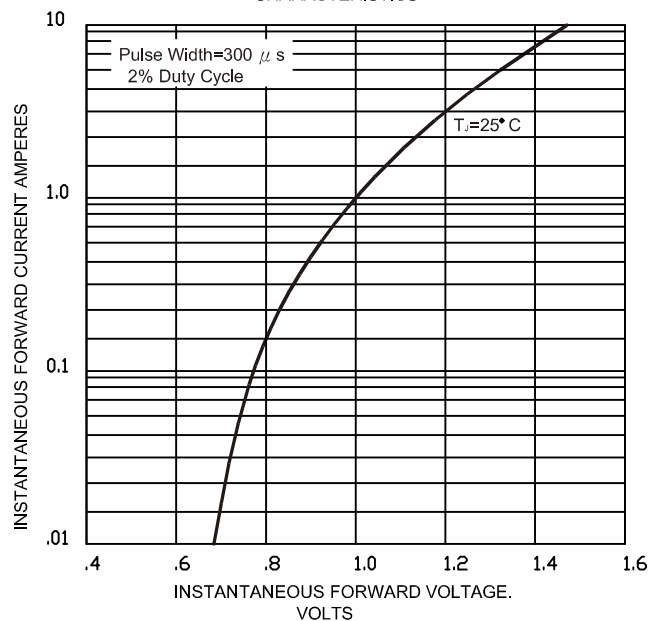


FIG.4-TYPICAL JUNCTION CAPACITANCE

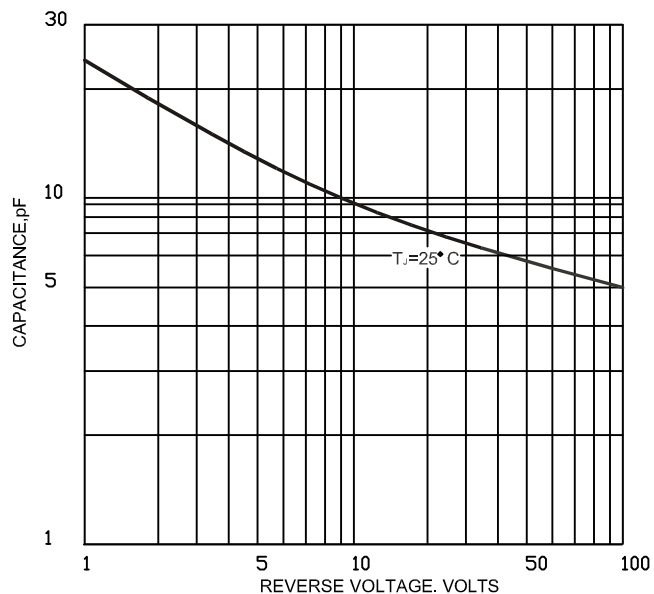


FIG.5- TYPICAL REVERS CHARACTERISTICS

