

SM4001 THRU SM4007

SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

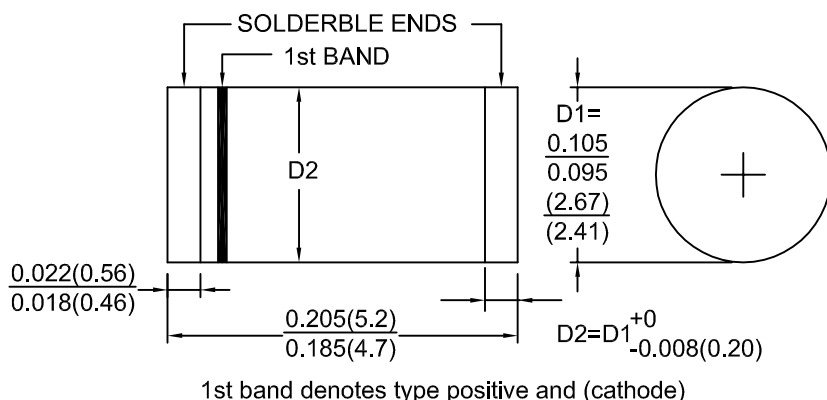
FEATURES:

- 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 TL=75° C	I _O	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 Ta=25° C at rated DC blocking voltage Ta=125° C	I _R	5.0 50.0							μ A
Maximum full load reverse current full cycle average at Ta=75° C	I _{RO}	30.0							μ A
Typical thermal resistance	R _{th-JA} R _{th-JL}	75 30							° C/W
Typical junction capacitance	C _j	12							pF
Operating junction temperature range	T _j	-65 to +150							° C
Storage temperature range	T _{stg}	-65 to +150							° C

RATING AND CHARACTERISTIC CURVES SM4001 THRU SM4007

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

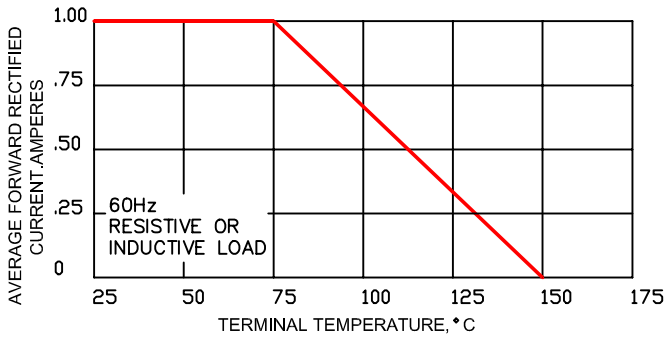


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

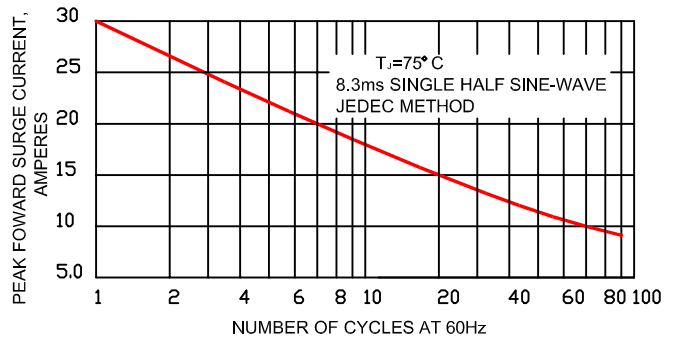


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

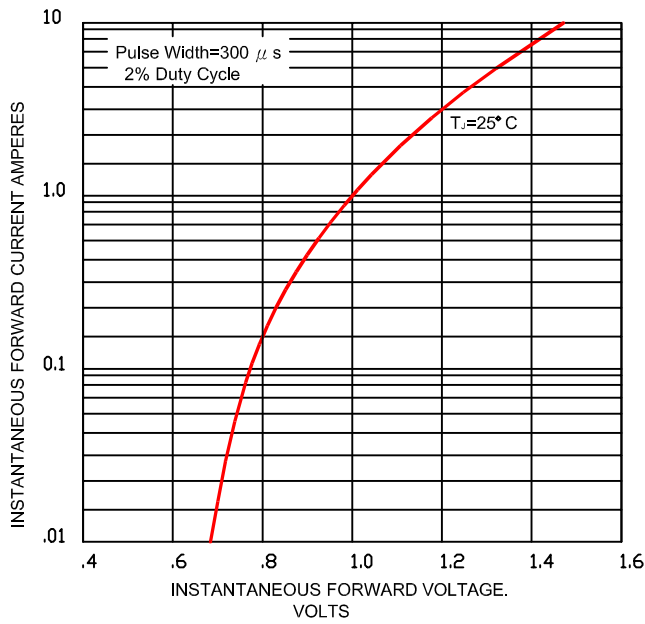


FIG.4-TYPICAL REVERS CHARACTERISTICS

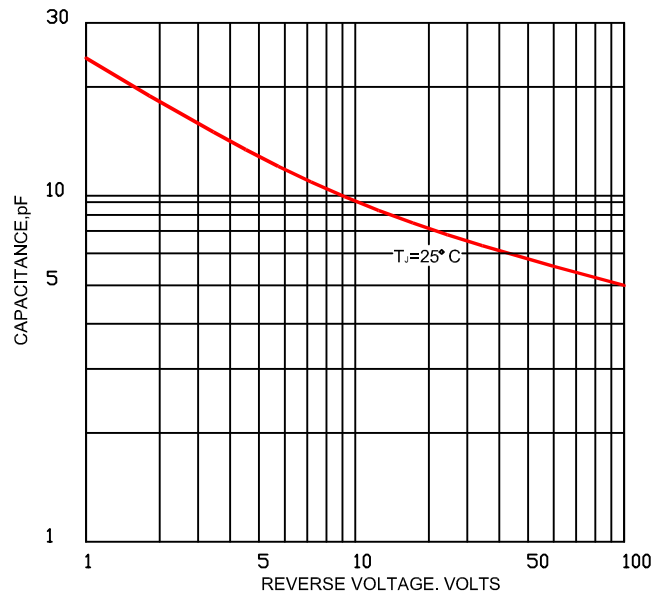


FIG.5-TYPICAL JUNCTION CAPACITANCE

