

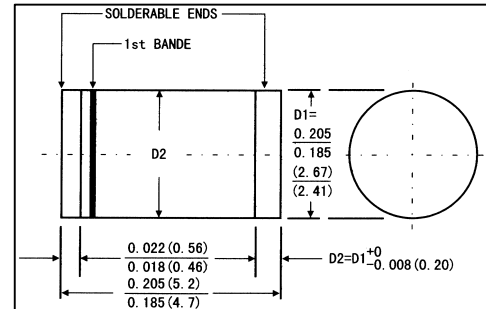
FEATURES

- . The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- . For surface mounted applications
- . Glass passivated junction
- . High temperature soldering guaranteed: 250°C/10 seconds, at terminals

MECHANICAL DATA

- . **Case:** JEDEC SMA(DO-214AB) molded plastic
- . **Terminals:** Lead solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.0041 ounce, 0.116 gram

MELF(DO-213AB)



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	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	100	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length at T _A =75°C	I _(AV)	1.0							Amp
Peak forward surge current (8.3ms half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	1.1							Volts
Maximum reverse current at rated DC Blocking Voltage	T _A =25°C	5.0							μ A
	T _A =125°C	50.0							
Typical Thermal Resistance	(Note 2) R _{θ JA}	75.0							°C/W
	(Note 3) R _{θ JL}	30.0							
Typical Junction Capacitance(Note 1)	C _J	15.0							pF
Maximum DC Blocking Voltage temperature	T _A	+150.0							°C
Operating and storage temperature range	T _J T _{STG}	-65 to +175							°C

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

1. Thermal resistance from junction to ambient, 0.24 X 0.24"(6.0 X 6.0mm) copper pads to each terminals
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RATINGS AND CHARACTERISTIC CURVES SM4001 THRU SM4007

FIG.1-FORWARD CURRENT DERATING CURVE

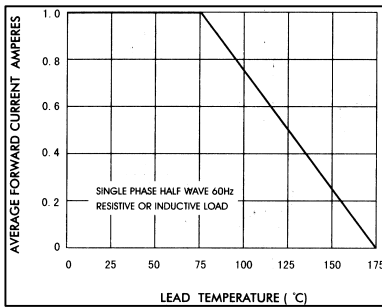


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

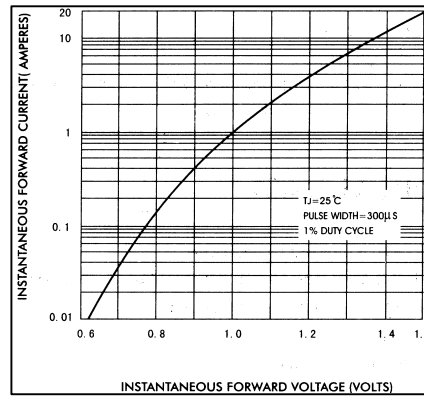


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

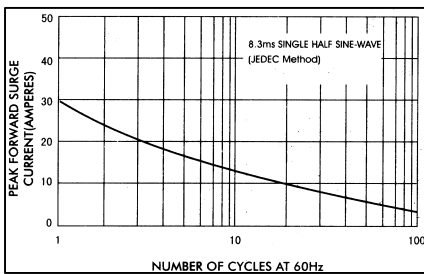


FIG.4-TYPICAL REVERSE CHARACTERISTICS

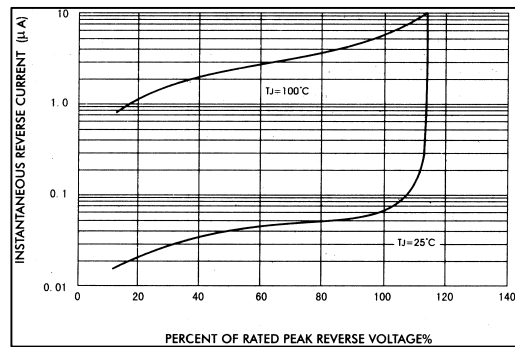


FIG.5-TYPICAL JUNCTION CAPACITANCE

