



SM4001 ~ SM4007

SURFACE MOUNT DIODES GLASS PASSIVATED RECTIFIERS

VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

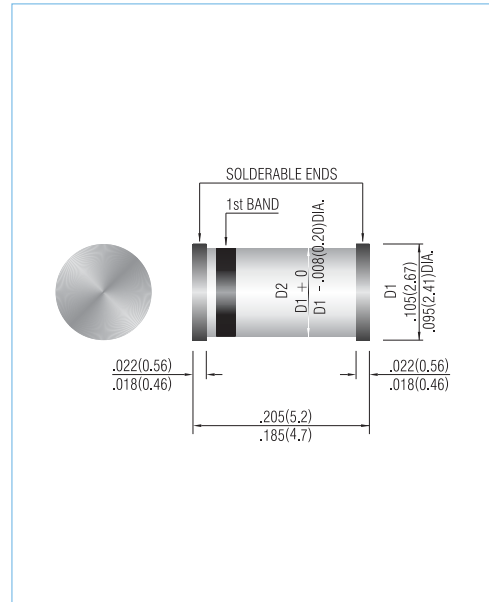
MELF / DL-41 Unit: inch (mm)

FEATURES

- For surface mounted applications.
- Glass passivated chip junction.
Low leakage current.
- Plastic package has underwrites laboratory flammability classification 94v-0
- High temperature soldering guaranteed: 250 °C / 10 seconds at terminals .
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case: Molded plastic,
Polarity: band indicate cathode .
Mounting Position: Any
Weight: 0.012 ounce, 0.3 gram.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	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 1.0A	V_F	1.1							V
Maximum DC Reverse Current $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_j=125^\circ\text{C}$	I_R	5.0 100							μA
Typical Junction capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	50							$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 TO +150							$^\circ\text{C}$

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal resistance from junction to terminal 6.0mm² copper pads to each terminal.



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RATING AND CHARACTERISTIC CURVES

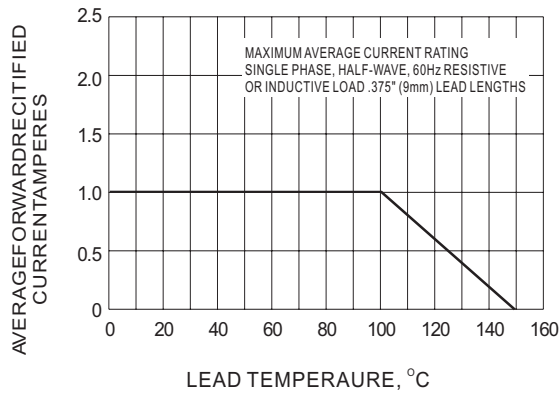


Fig.1- FORWARD CURRENT DERATING CURVE

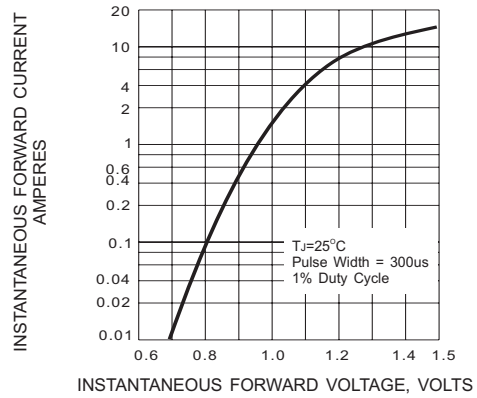


Fig.2- TYPICAL FORWARD CHARACTERISTIC

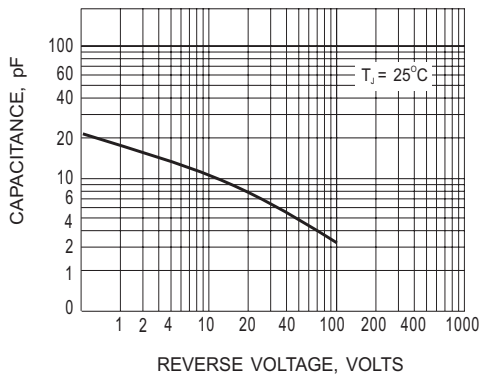


Fig.3- TYPICAL JUNCTION CAPACITANCE

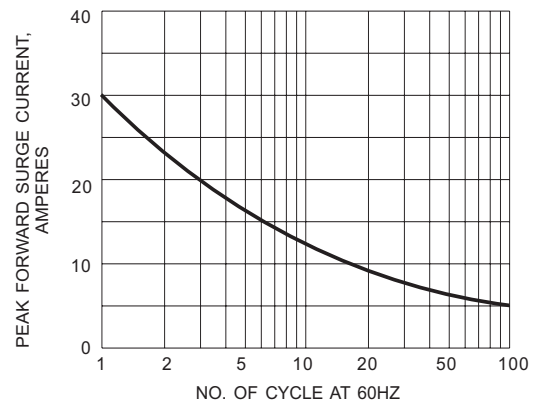


Fig.4- PEAK FORWARD SURGE CURRENT

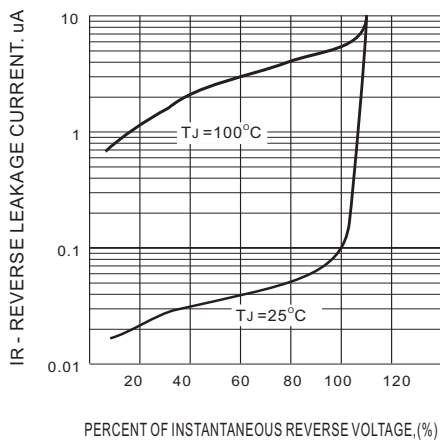


FIG.5 TYPICAL REVERSE CHARACTERISTICS



SM4001 ~ SM4007

Part No_packing code_Version

SM4001_R2_100A1

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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