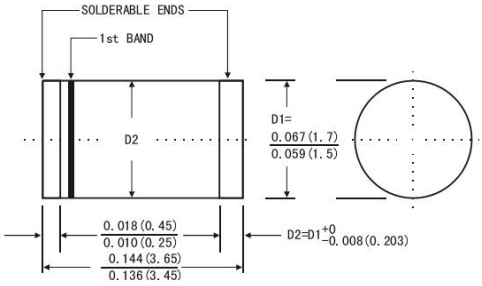
LM4001 THRU LM4007

SURFACE MOUNT RECTIFIERS

REVERSE VOLTAGE: 50 - 1000 V CURRENT: 1.0 A

MiniMELF (DO-213AA)



Dimensions in millimeters

FEATURES

- ◇The plastic package carries Underwrites Laboratory
- ◇ Flammability classification 94V-0
- ◇ For surface mounted application

MECHANICAL DATA

- ◇ Case: MiniMELF(DO-213AA), molded plastic body
- ◇ Terminals: Lead solderable per MIL-STD-750, method 2026
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

MDD Catalog Number		LM 4001	LM 4002	LM 4003	LM 4004	LM 4005	LM 4006	LM 4007	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 forword rectified current T_A=75°C	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25							A
Maximum forward voltage at 1.0A	V_F	1.1							V
Maximum DC reverse current @T_A=25°C	I_R	5.0							μA
at rated DC blockjing voltage @T_A=125°C		50							
Typical junction capacitance (NOTE 1)	C_j	15							pF
Typical thermal resistance (NOTE 2)	$R_{j\theta L}$	75							°C/W
Typical thermal resistance (NOTE 3)	$R_{j\theta A}$	30							°C/W
Operating temperature range	T_j	- 65 --- + 175							°C
Storage temperature range	T_{STG}	- 65 --- + 175							°C

NOTES:1. Measured at 1.0MHz and applied average voltage of 4.0V DC.

2. Thermal resistance junction to lead, 6.0 mm^2 coppeer pads to each terminal.

3. Thermal resistance junction to ambient, 6.0 mm^2 coppeer pads to each terminal.

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RATINGS AND CHARACTERISTIC CURVES LM4001 THRU LM4007

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

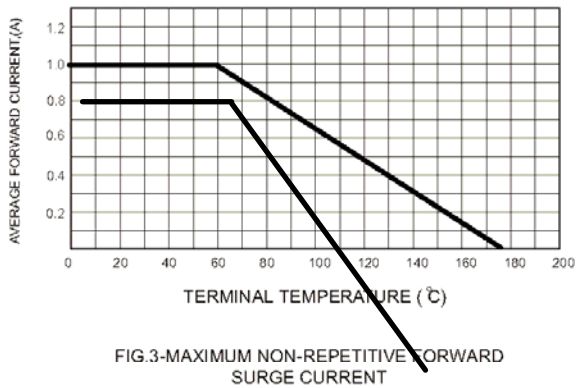


FIG.2-TYPICAL FORWARD CHARACTERISTICS

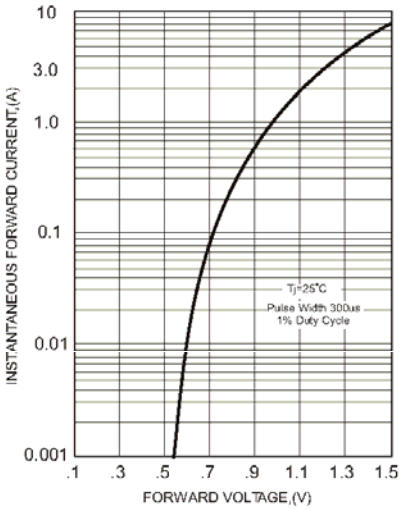


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

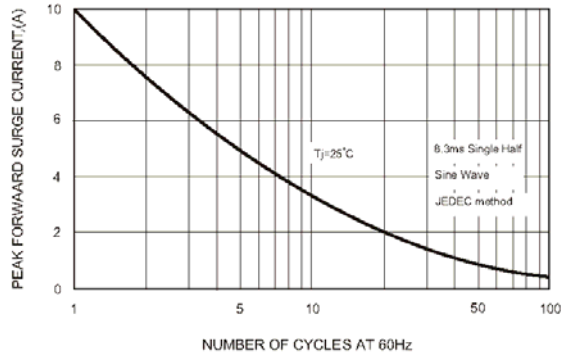


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

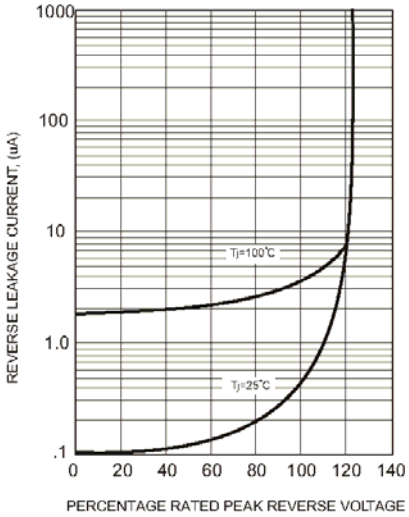
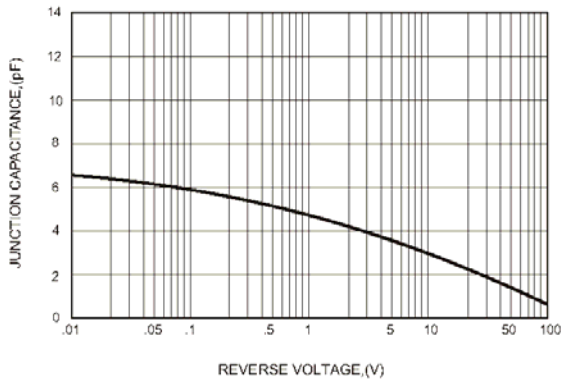


FIG.4-TYPICAL JUNCTION CAPACITANCE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

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