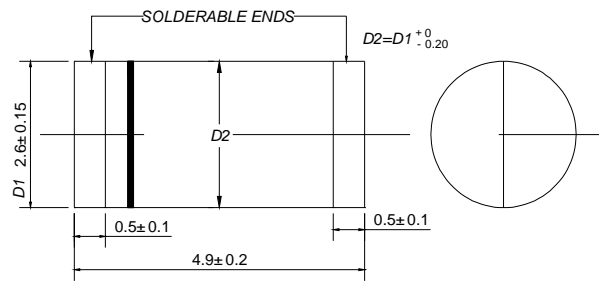


EM513~2000

Description



Mechanical Dimensions



MELF(DO-213AB)

Dimensions in millimeters

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low leakage current
- Metallurgically bonded construction

MECHANICAL DATA

- Case:JEDEC MELF (DO-213AB),molded plastic over passivated chip
- Terminals:Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0046 ounces, 0.116 gram
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		EM 513	EM 516	EM 518	EM 2000	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	1300	1600	1800	2000	V
Maximum RMS voltage	V_{RMS}	910	1120	1260	1400	V
Maximum DC blocking voltage	V_{DC}	1300	1600	1800	2000	V
Maximum average forward rectified current $T_A=75$	$I_{(AV)}$	1.0				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40				A
Maximum forward voltage at 1.0A	V_F	1.1				V
Maximum DC reverse current @ $T_A=25C$ at rated DC blockjing voltage @ $T_A=125C$	I_R	5.0 50				uA
Typical junction capacitance (NOTE 1)	C_j	15				pF
Typical thermal resistance (NOTE 2)	$R_{j\theta L}$	20				C/W
Typical thermal resistance (NOTE 3)	$R_{j\theta A}$	50				C/W
Operating temperature range	T_j	- 55 --- + 175				C
Storage temperature range	T_{STG}	- 55 --- + 175				C

- NOTES:1. Measured at 1.0MHz and applied average voltage of 4.0V DC.
2. Thermal resistance junction to lead, 6.0 mm² coppeer pads to each terminal.
3. Thermal resistance junction to ambient, 6.0 mm² coppeer pads to each terminal.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

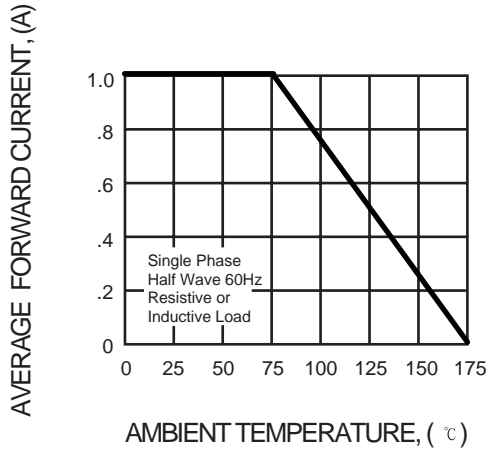


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

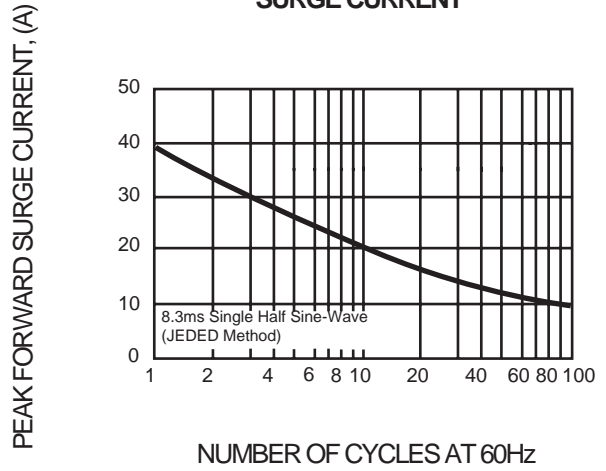


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

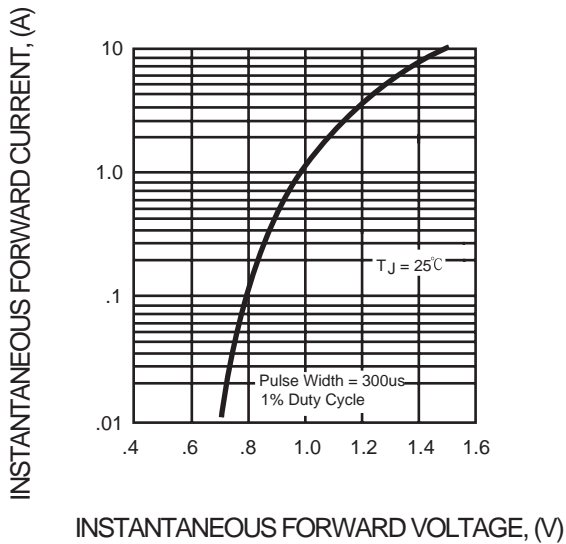


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

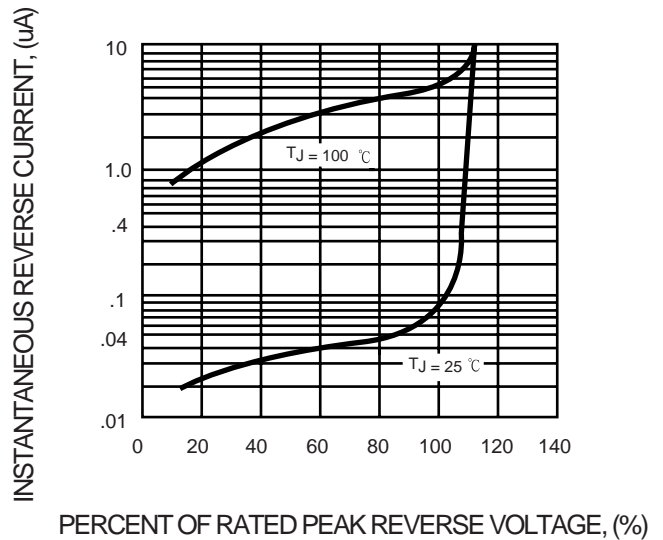


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

