

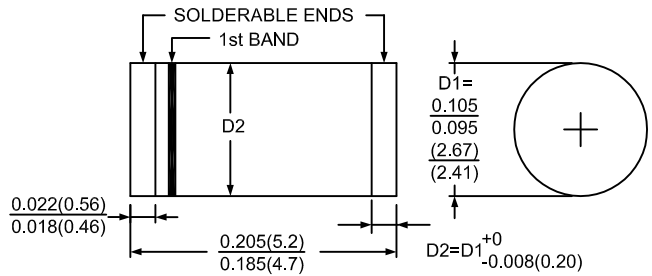


**SURFACE MOUNT GLASS PASSIVATED RECTIFIER**

**FEATURES**

- Glass Passivated chip
- Low Forward Voltage Drop
- Low Leakage
- High Current Capability
- High Surge Current Capability
- Idle for surface mount applications
- Built-in strain relief

**MELF / DO-213AB**



1st band denotes type positive and (cathode)

Dimensions in inches and (millimeters)

**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
- Lead Free: For RoHS/Lead Free Version, Green molding compound as per IEC61249 Std

**Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified**

Parameter Symbol	Symbol	SM1200	SM1400	SM1800	SM1600	SM2000	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1200	1400	1800	1600	2000	V
Maximum RMS voltage	V <sub>RMS</sub>	840	980	1120	1260	1400	V
Maximum DC blocking voltage	V <sub>DC</sub>	1200	1400	1800	1600	2000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1.0					A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I <sub>Fsm</sub>	30					A
Maximum instantaneous forward voltage at 1A	V <sub>F</sub>	1.15					V
Maximum leakage current T <sub>J</sub> = 25°C	I <sub>R</sub>	5					uA
Maximum leakage current T <sub>J</sub> = 100°C		50					
Typical Junction Capacitance (Note1)	C <sub>J</sub>	25	18			pF	
Typical thermal resistance (Note2)	R <sub>thA</sub>	≤50					°C/W
Operating temperature range	T <sub>J</sub>	-55 to +175					°C
Storage temperature range	T <sub>STG</sub>	-55 to +175					°C

**Note:** (1). Measured at 1.0MHz and applied reverse voltage of 4.0VDC  
 (2). Thermal resistance from junction to ambient at , P.C.B. mounted.



RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Rated forward current vs. ambient temperature

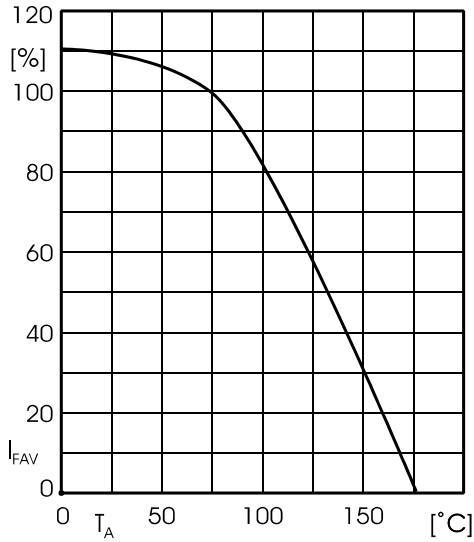


Fig. 2 Forward characteristics ( typical values )

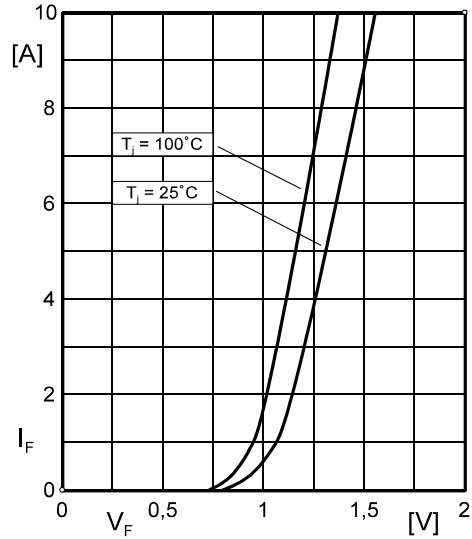


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

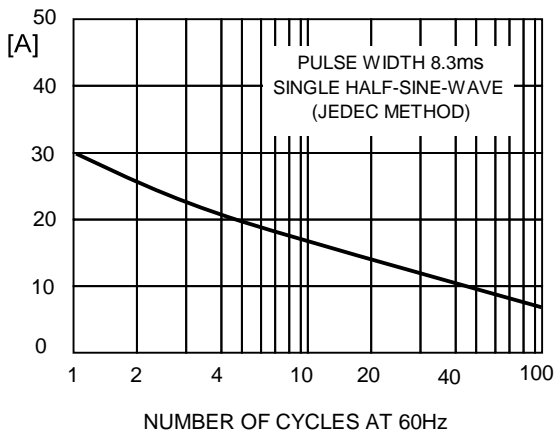
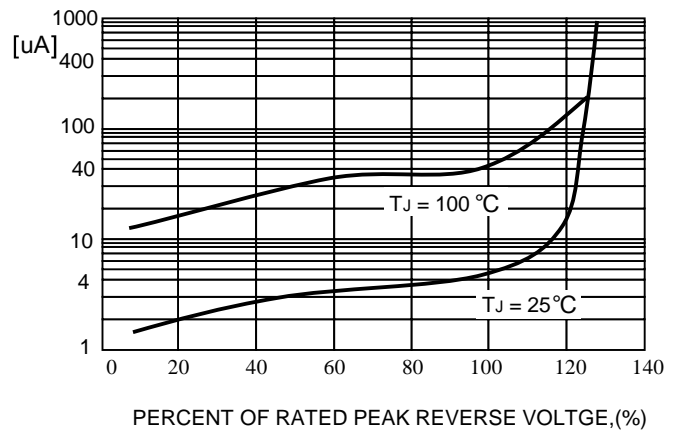


FIG.4-TYPICAL REVERSE CHARACTERISTICS





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