

SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

Reverse Voltage - 50 to 1000 V

Forward Current - 1.0 A

FEATURES

- ◆ Low power loss, high efficient
- ◆ High surge current capability
- ◆ Low forward voltage drop
- ◆ For use in low voltage, high frequency inverters, free wheeling application
- ◆ Guarding for over voltage protection

MECHANICAL DATA

- ◆ Case: Molded plastic use UL94V-0 recognized flame retardant epoxy
- ◆ Terminals: Plated terminals
- ◆ Polarity: Silver color band on body denotes Cathode
- ◆ Mounting position: Any
- ◆ Weight: 0.0317 gram



Maximum Ratings And Electrical Characteristics

Rating at 25°C Ambient temp. Unless otherwise specified. Single phase, half sine wave, 60HZ ,resistive or inductive load. For capacitive load, derate current by 20%

Parameter	Symbols	GL1A	GL1B	GL1D	GL1G	GL1J	GL1K	GL1M	Units
Maximum Current 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 $T_L=75^{\circ}C$	$I_{(AV)}$	1.0							A
Peak Forward Surge current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	10							A
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.1							V
Maximum DC Reverse Current at rated DC Blocking Voltage $T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$	I_R	5.0 250							μA
Typical junction capacitance (Note1)	C_J	15							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	125							$^{\circ}C/W$
Operating Junction Temperature Range	T_J	-65 ~ +150							$^{\circ}C$
Storage Temperature Range	T_{stg}	-65 ~ +150							$^{\circ}C$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient

Ratings And Characteristic Curves

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

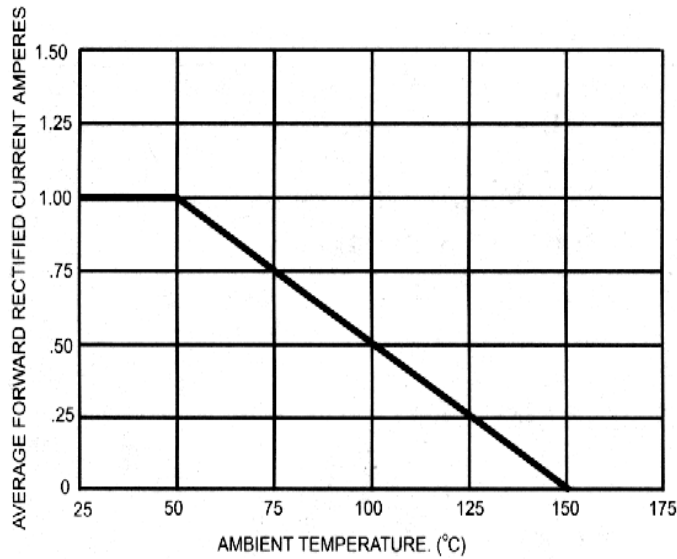


FIG. 2 – MAXIMUM NON - REPETITIVE PEAK FORWARD SURGE CURRENT

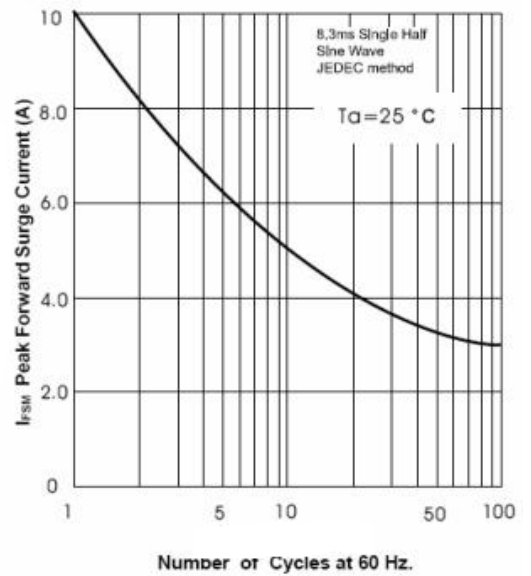


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

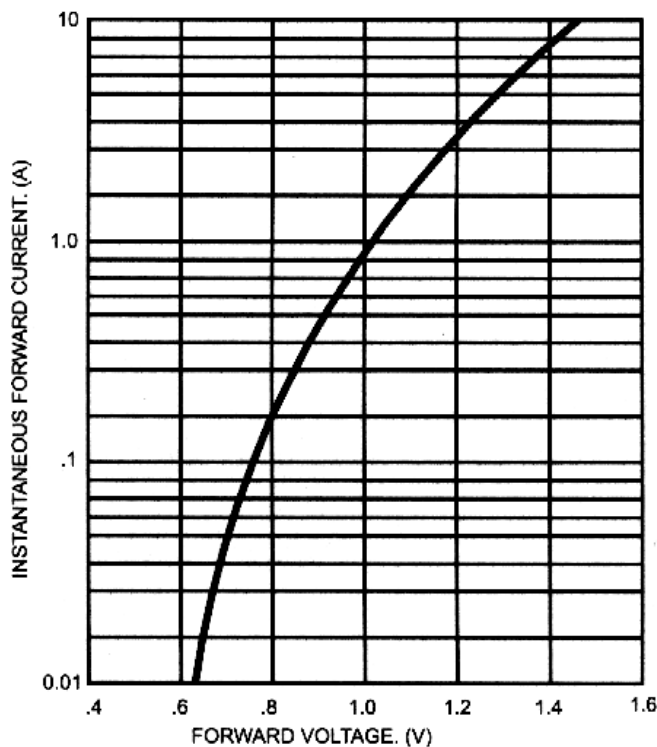
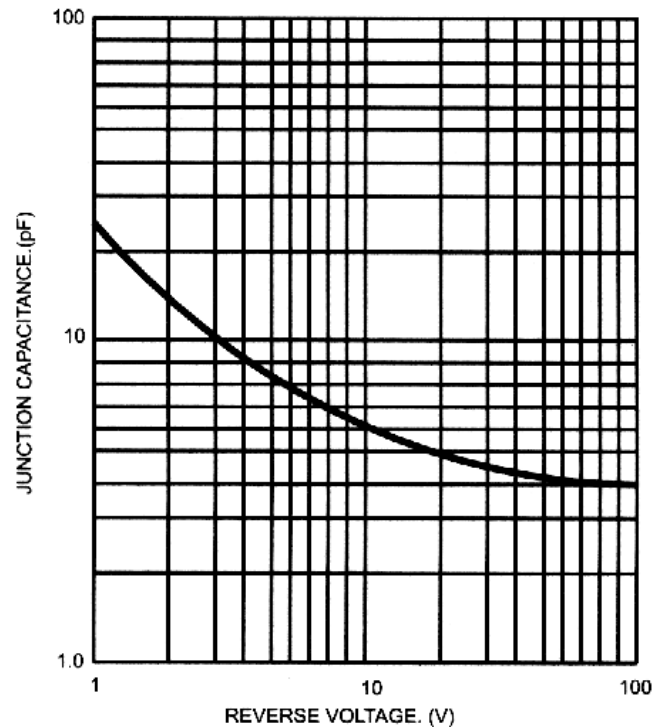
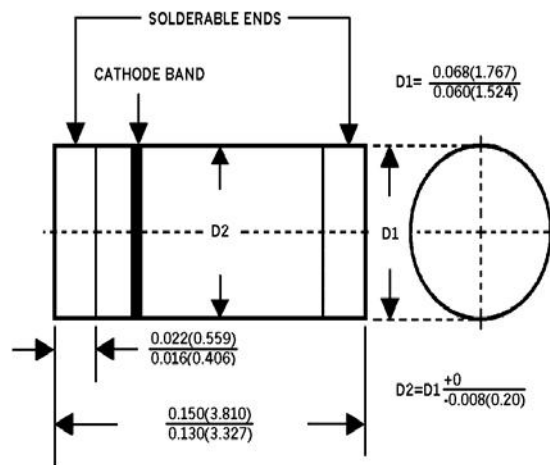


FIG. 4 – TYPICAL JUNCTION CAPACITANCE



Package Outline DO-213AA/MINI MELF



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-213AA/MINI MELF	Tape/Reel, 7" reel	2500	EIA-481-1