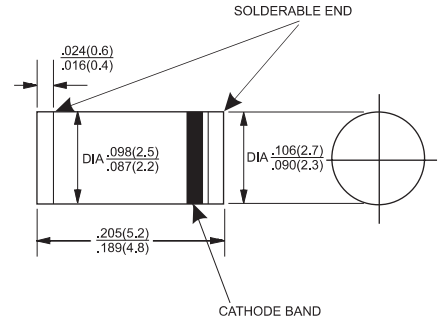




MELF



Features

- ✧ Glass Passivated Junction
- ✧ High Current Capability
- ✧ Low Forward Voltage Drop
- ✧ High Reliability and Low Leakage
- ✧ For Surface Mount Application
- ✧ Plastic Material - UL Flammability Classification Rating 94V-0

Mechanical Data

- ✧ Case: MELF, Plastic
- ✧ Polarity: Cathode band
- ✧ Approx Weight: 0.25 grams
- ✧ Mounting Position: Any

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	Symbol	DL 4001	DL 4002	DL 4003	DL 4004	DL 4005	DL 4006	DL 4007	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	71	141	283	424	566	707	V
Maximum Average Forward Rectified Current @ Terminal Temp @ $T_T = 75^\circ\text{C}$	I_O	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 @ $I_F = 1.0\text{A}$	V_F	1.1							V
Maximum dc Reverse Current @ $T_A = 25^\circ\text{C}$	I_R	5.0							μA
Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		50							
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	50							K/W
Typical Junction Capacitance (Note 1)	C_j	15							pF
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

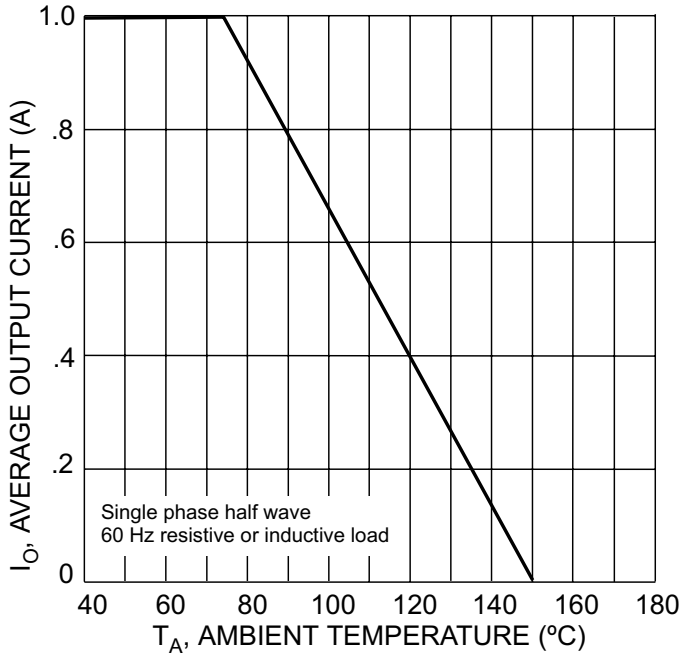


Fig. 1 Forward Current Derating Curve

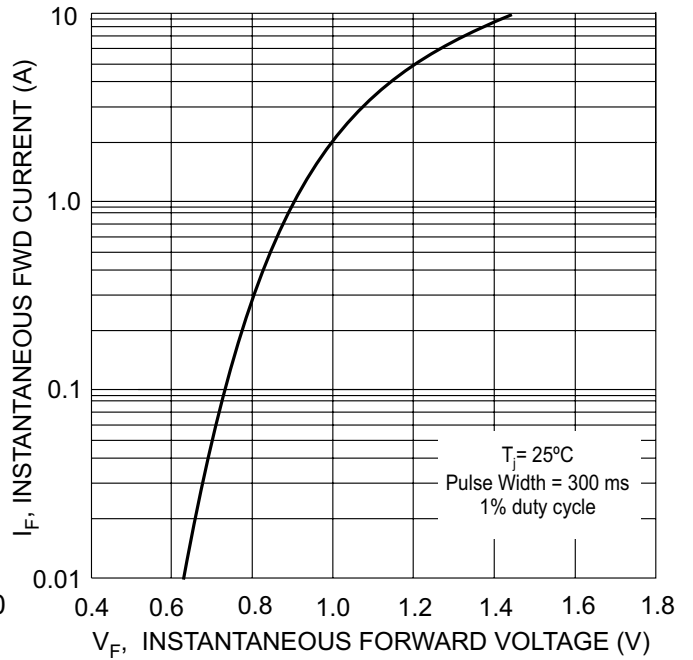


Fig. 2 Typical Forward Characteristics

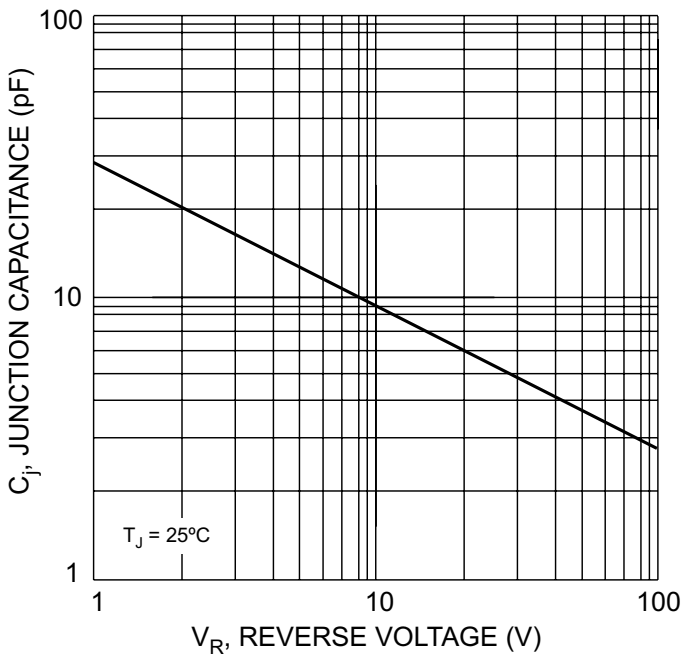


Fig. 3 Typical Junction Capacitance

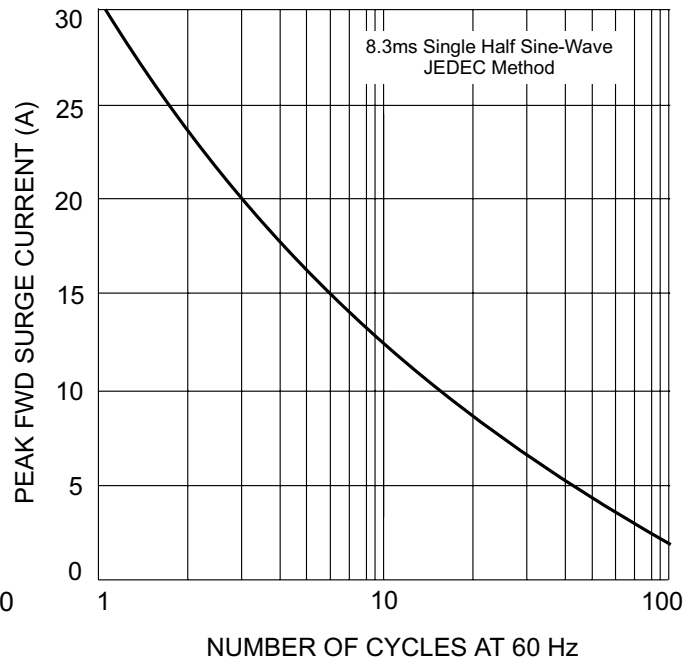


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current