

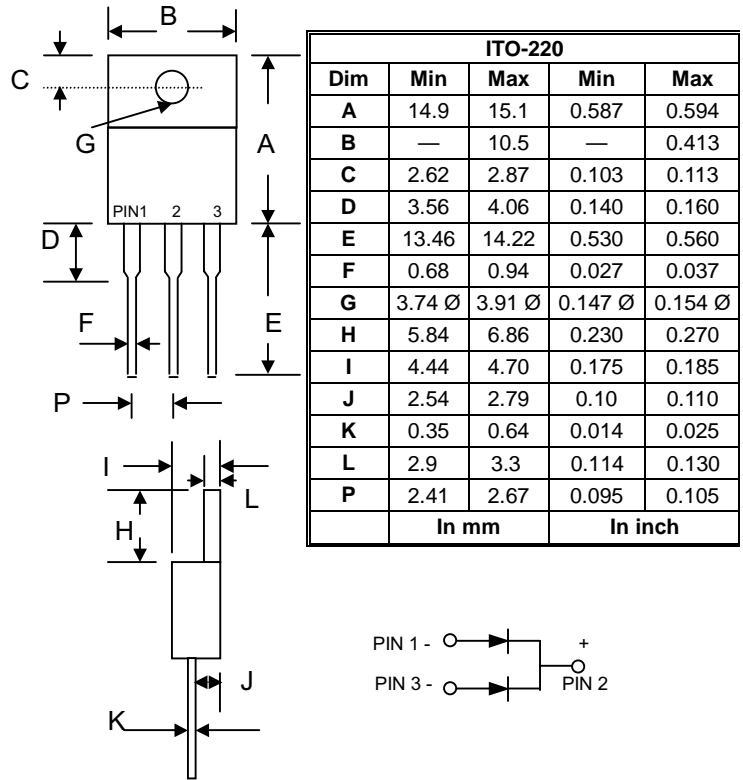
Data Sheet 2612, Rev.A

Features

- Glass Passivated Die Construction
- Super-Fast Switching for High Efficiency
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: ITO-220 Full Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	ER 1000FCT	ER 1001FCT	ER 1001AFCT	ER 1002FCT	ER 1003FCT	ER 1004FCT	ER 1006FCT	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}								V	
Working Peak Reverse Voltage	V _{RW}	50	100	150	200	300	400	600		
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	420	V	
Average Rectified Output Current @T _C = 100°C	I _o	10							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A	
Forward Voltage @I _F = 5.0A	V _{FM}	0.95			1.3		1.7		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	10				400				µA
Reverse Recovery Time (Note 1)	t _{rr}	35			50				nS	
Typical Junction Capacitance (Note 2)	C _j	70			50				pF	
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C	

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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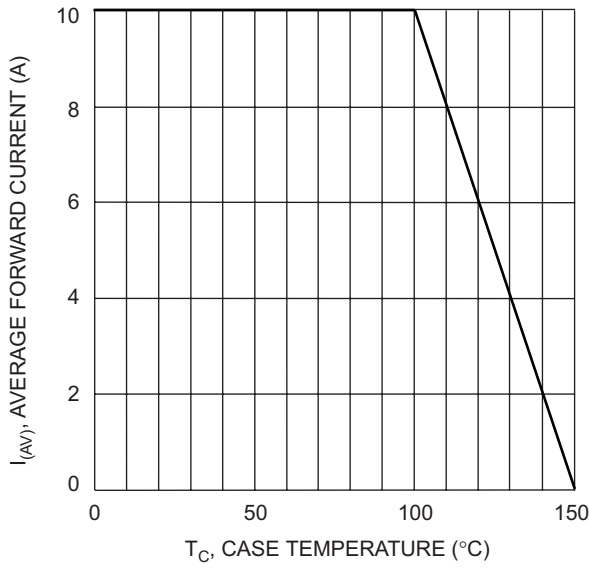


Fig. 1 Forward Current Derating Curve

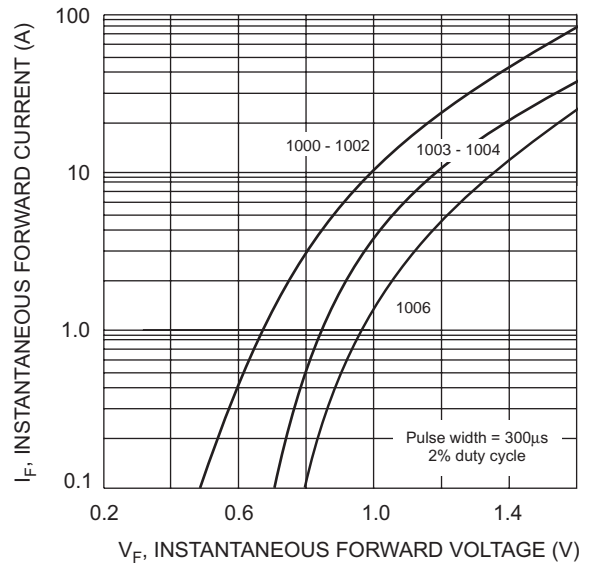


Fig. 2 Typical Forward Characteristics

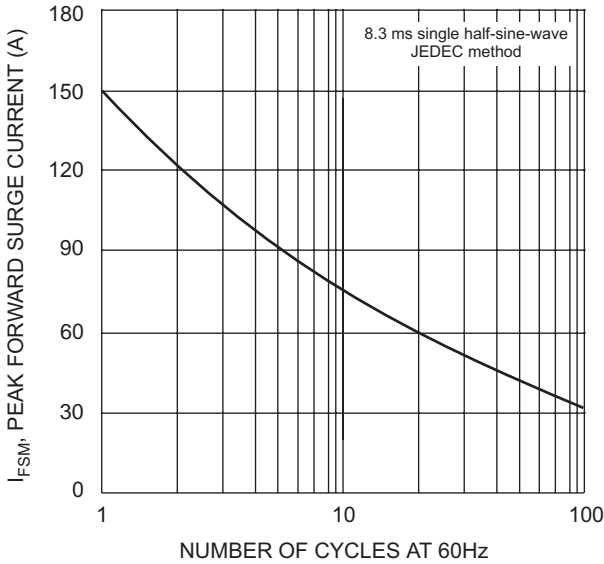


Fig. 3 Max Non-Repetitive Surge Current

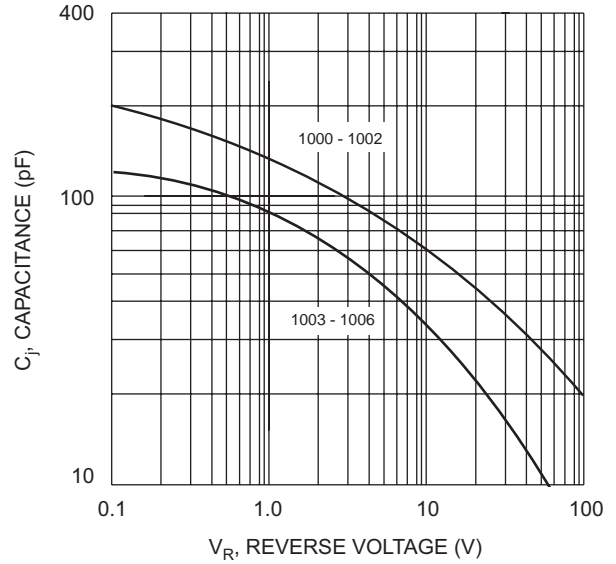


Fig. 4 Typical Junction Capacitance

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