



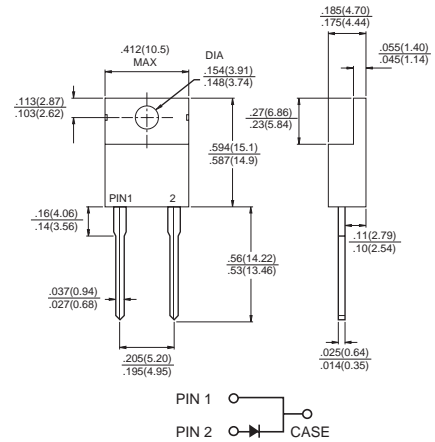
TO-220AC

Features

- ◇ Low Reverse Recovery Time
- ◇ Low Leakage
- ◇ Low Forward Voltage Drop
- ◇ High Current Capability
- ◇ High Surge Capability
- ◇ Plastic Material - UL Flammability Rating 94V-0
- ◇ High Reliability

Mechanical Data

- ◇ Case: TO-220AC, Molded Plastic
- ◇ Polarity: See Diagram at Right
- ◇ Approx. Weight: 2.24 grams
- ◇ Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25° C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

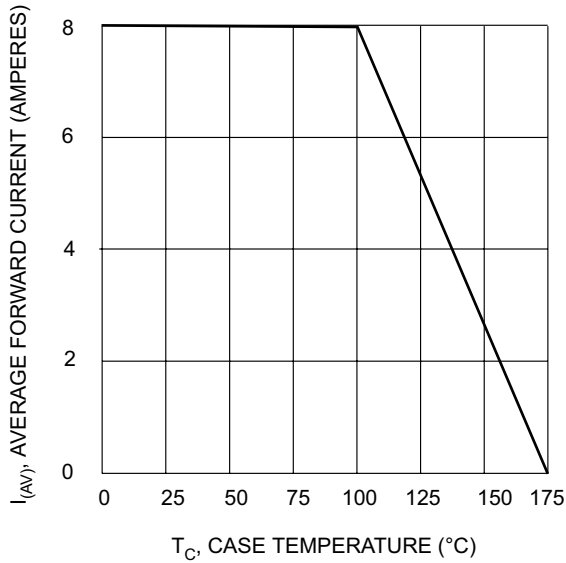
Characteristic	Symbol	FR801	FR802	FR803	FR804	FR805	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ T _C = 100°C	I _(AV)	8.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150					A
Maximum Instantaneous Forward Voltage @ 8.0A DC	V _F	1.3					V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A = 25°C	I _R	10					μA
Maximum Full Load Reverse Current Full Cycle @ T _C = 100°C	I _R	150					μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150			250		ns
Typical Junction Capacitance (Note 2)	C _J	70					pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175					°C

Notes: 1. Reverse Recovery Test Conditions: I_F = 0.5 A, I_R = 1.0 A, I_{RR} = 0.25 A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

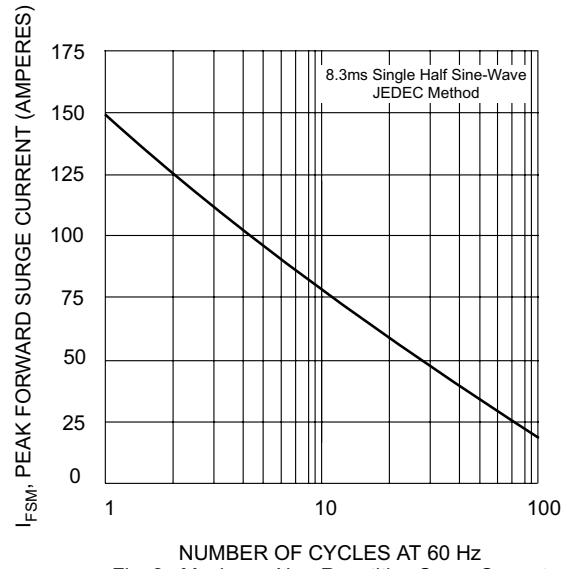


FR801-FR805

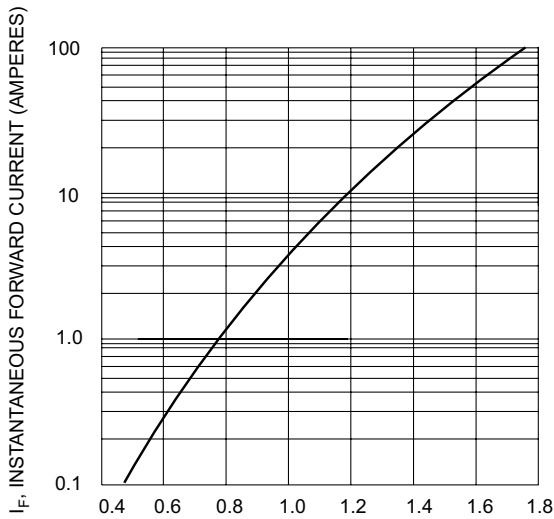
8.0A Fast Recovery Rectifier



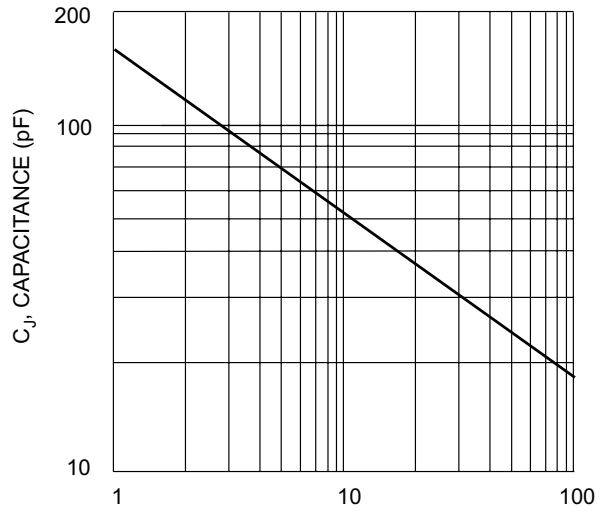
T_C , CASE TEMPERATURE (°C)
Fig. 1, Forward Current Derating Curve



8.3ms Single Half Sine-Wave
JEDEC Method
Fig. 2, Maximum Non-Repetitive Surge Current



V_F , INSTANTANEOUS FORWARD VOLTAGE (VOLTS)
Fig. 3, Typical Instantaneous Forward Characteristics



V_R , REVERSE VOLTAGE (VOLTS)
Fig. 4, Typical Junction Capacitance

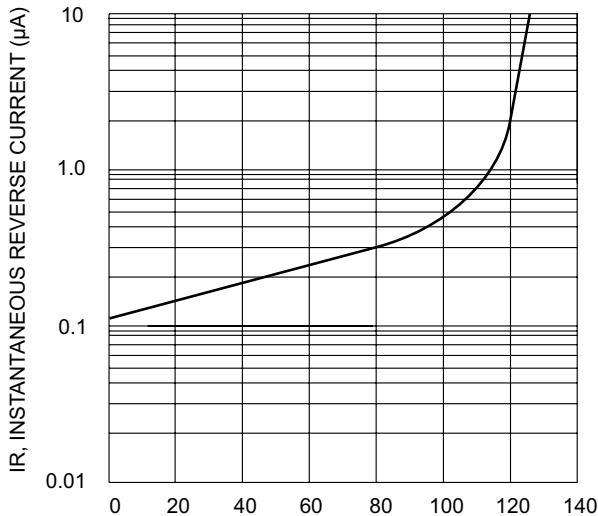


Fig. 5, Typical Reverse Characteristics