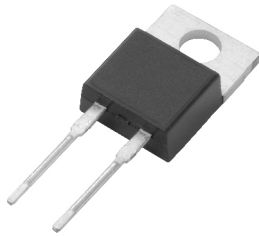


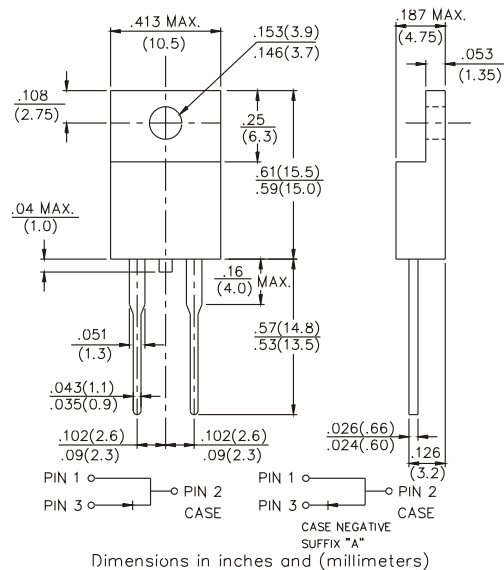
FR801 thru FR807

FAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 8.0 AMPERES



TO-220AC



Dimensions in inches and (millimeters)

FEATURES

- High Current Capability
- High surge Current Capability
- Low reverse current
- Component in accordance to RoHs 2002/95/EC

MECHANICAL DATA

Case : TO220AC Molded plastic
Case Material Molded Plastic. UL Flammability
Classification Rating 94V-0
Solderable per MIL-STD-202, Method 208 guaranteed
Polarity : As Marked on the body
Weight : 1.899 gram approximate

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	FR801	FR802	FR803	FR804	FR805	FR806	FR807	UNIT
Maximum repetitive 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	I _F	8.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	125.0							A
Maximum Instantaneous Forward Voltage @ I _F =8.0	V _F	1.30							V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I _R	10.0 200.0							uA
Typical Junction Capacitance(NOTE1)	C _J	200							pF
Maximum Reverse Recovery Time, (NOTE2)	T _{rr}	150				250	500		ns
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

2.Measured with $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$

FR801 thru FR807

FAST RECOVERY RECTIFIER

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

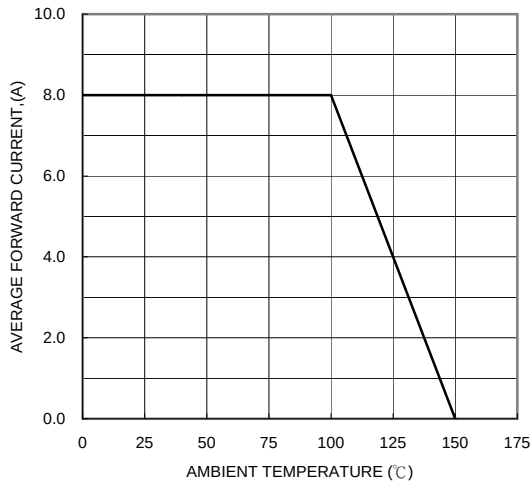


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

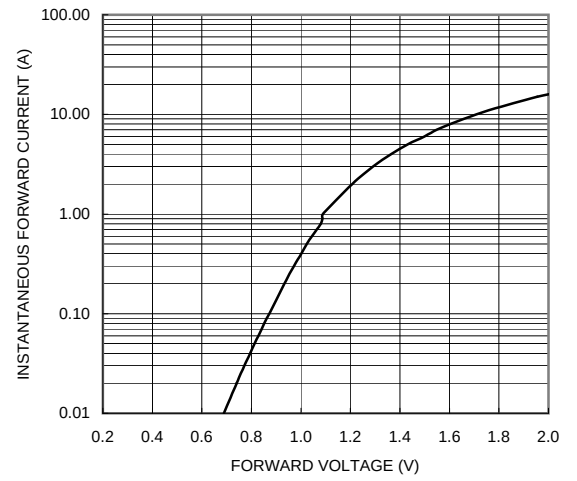


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

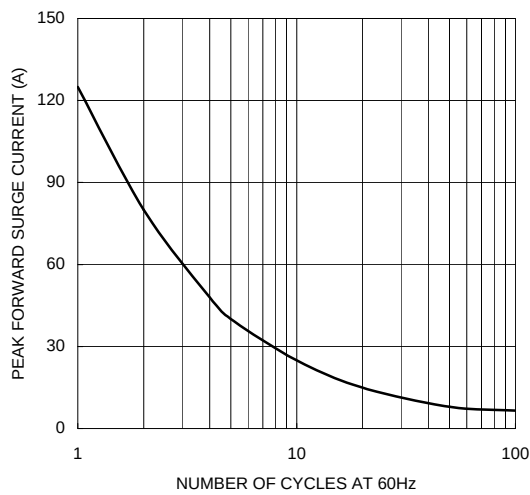


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

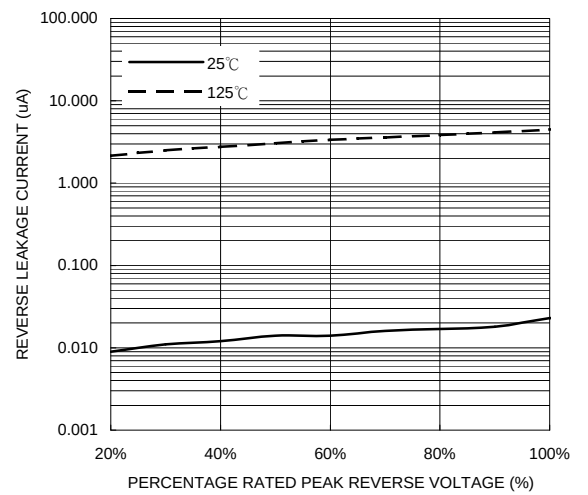


FIG. 5-TYPICAL JUNCTION CAPACITANCE

