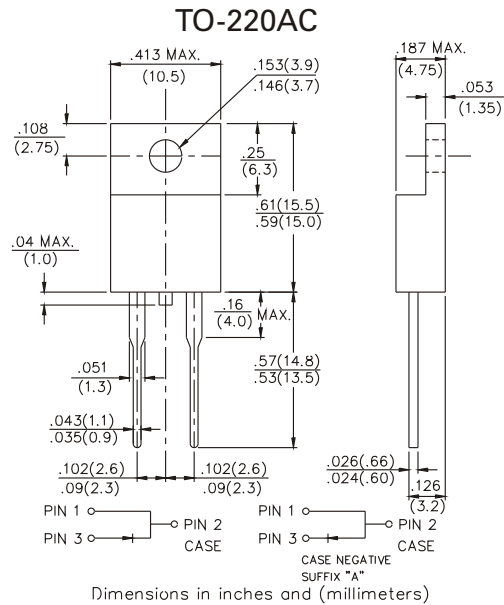
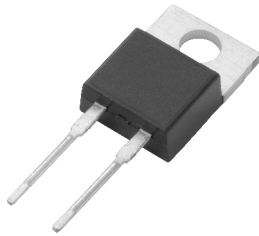


FR801 thru FR807

FAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 8.0 AMPERES



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 @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	10.0 200.0							μA
Typical Junction Capacitance(NOTE 1)	C_J	200							pF
Maximum Reverse Recovery Time, (NOTE 2)	T_{rr}	150					250	500	ns
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

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

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

FR801 thru FR807

FAST RECOVERY RECTIFIER

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

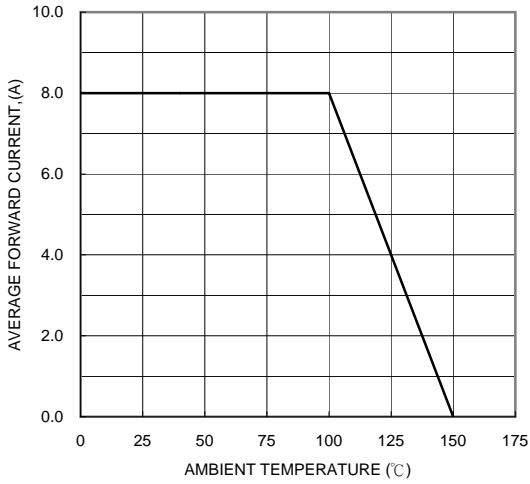


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

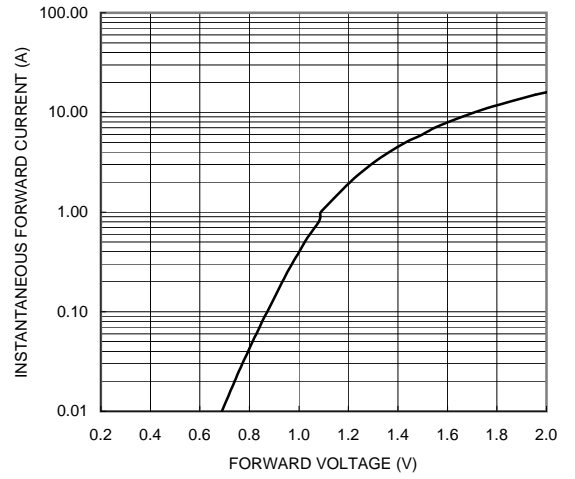


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

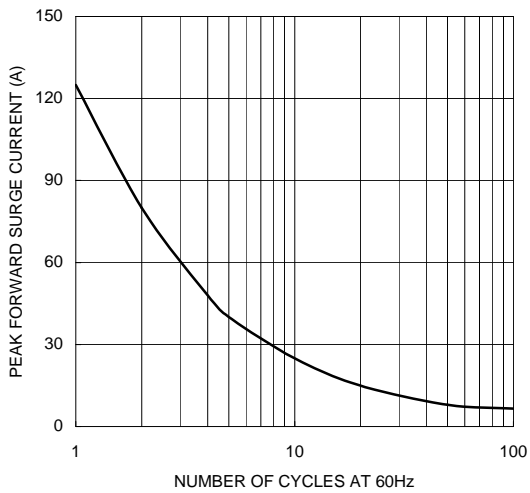


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

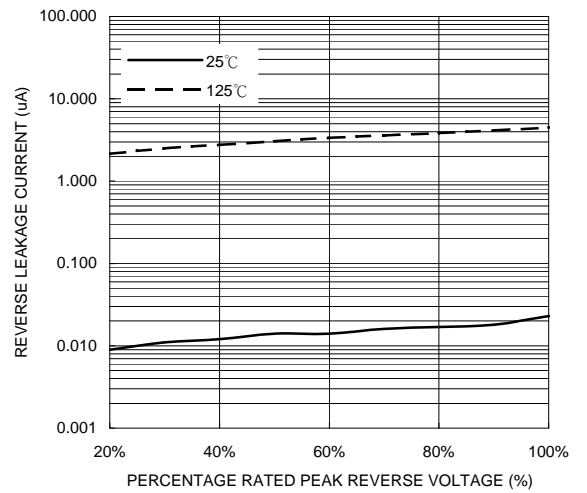


FIG. 5-TYPICAL JUNCTION CAPACITANCE

