

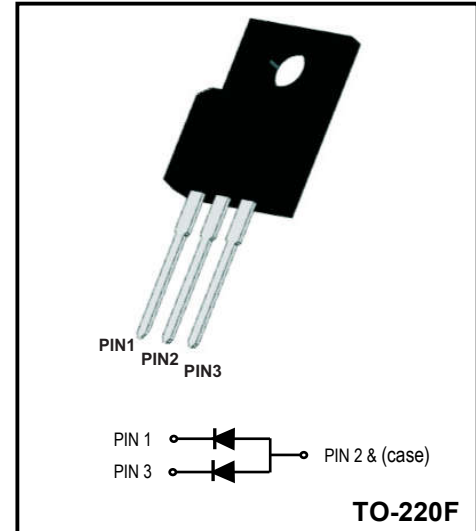
Super Fast Rectifiers
Reverse Voltage - 200V
Forward Current - 30A

FEATURES

- ◆ Glass passivated chip junctions
- ◆ Super fast recovery time for switching mode application
- ◆ High Forward Surge Capability
- ◆ Low Reverse Current
- ◆ Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- ◆ Circuit figure: Common Anode
- ◆ Leads: Solderable per mil-std-202, Method 208
- ◆ Polarity: as marked
- ◆ Mounting torque: 5 in-lbs maximum
- ◆ Terminals: Puretin plated
- ◆ Weight: TO-220F 1.70 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C)

RATINGS	SYMBOL	Value	Units
Maximum repetitive reverse voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC blocking voltage	V_{DC}	200	V
Maximum average forward current	I_{AV}	30	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400	A
Typical thermal resistance per diode (Note 1)	R_{θ-JC}	4.0	°C/W
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 ~ +150	°C
CHARACTERISTICS			
Typical forward voltage per leg at 15A	V_F	1.00	V
Maximum average reverse current at rated DC blocking voltage	I_R	5 250	μA
Typical reverse recovery time (Note 2)	T_{RR}	35	nS

Notes: 1. Thermal resistance from junction to case.
2. Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

Ratings And Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

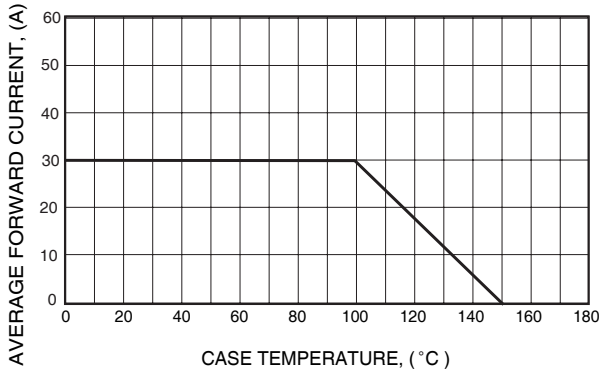


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

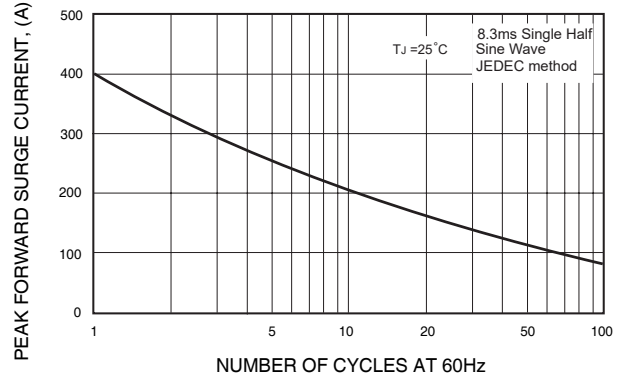


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

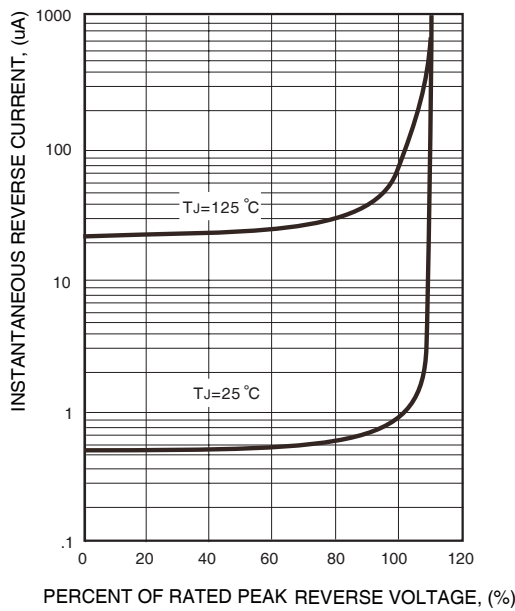
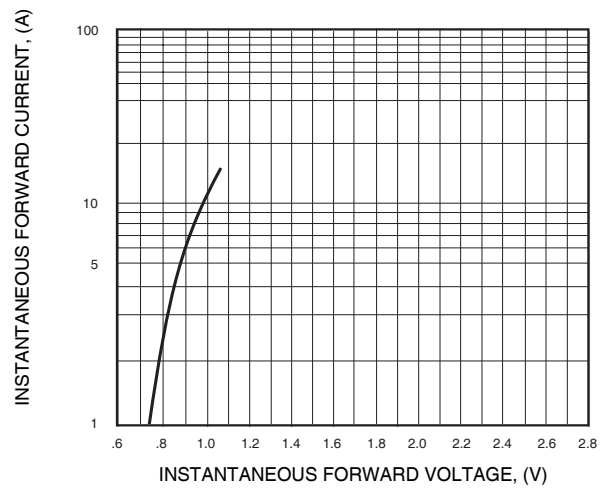


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package outline Dimensions in millimeters

TO-220F

