



Excellent Schottky Rectifier

REVERSE VOLTAGE - 45 Volts
FORWARD CURRENT - 30.0 Amperes

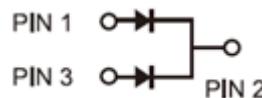
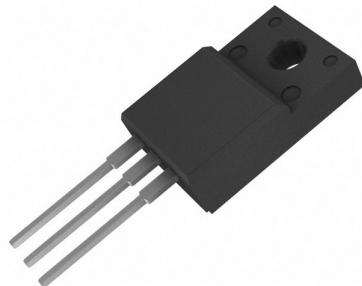
FEATURES

- Low power loss, high efficiency
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- Excellent high temperature stability
- Excellent Schottky technology

MECHANICAL DATA

- Case: TO-220F
- Polarity: As marked
- Weight: Approximated 1.6 grams

TO-220F



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%

Characteristics	Symbol	Value		Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45		V
RMS Reverse Voltage	V_{RMS}	31.5		V
Forward Voltage Drop $I_F = 3 \text{ A} \quad (T_J=25^\circ\text{C})$ $I_F=15\text{A} \quad (T_J=25^\circ\text{C})$	V_F	Typ. 0.34 - - 0.51	Max. - - - -	V
Maximum Reverse Current at Rated V_{RRM} $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R	Max. 500 35		μA mA
Maximum Average Forward Rectified Current Total device Per diode	I_O	30 15		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150		A
Peak Repetitive Reverse Current at $t_p=2 \mu\text{s}$, 1 kHz,	I_{RRM}	1.0		A
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150		°C



Rating and Characteristic Curves

FIG. 1-Typical Forward Current Derating Curve

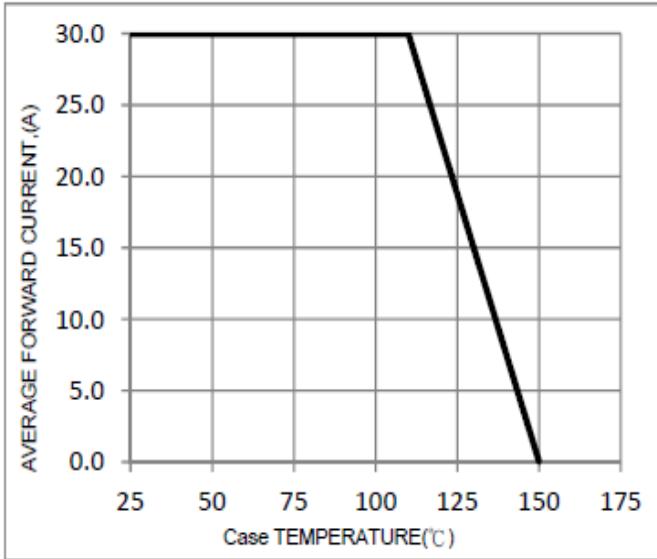


FIG. 2-Typical Forward Characteristics

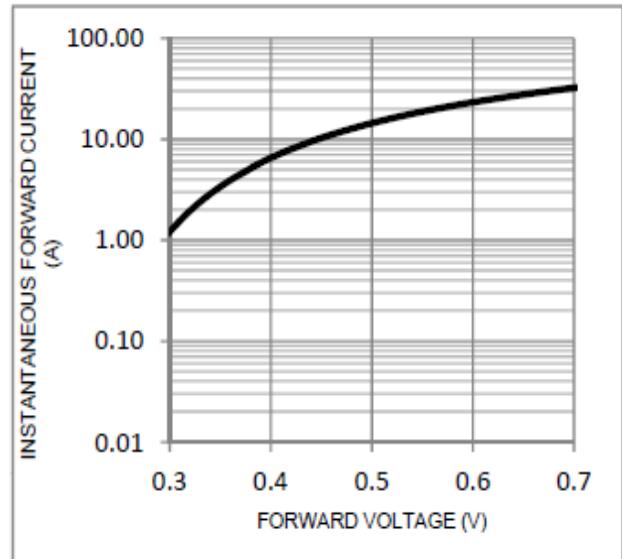


FIG. 3-Maximum Non-Repetitive Forward Surge Current

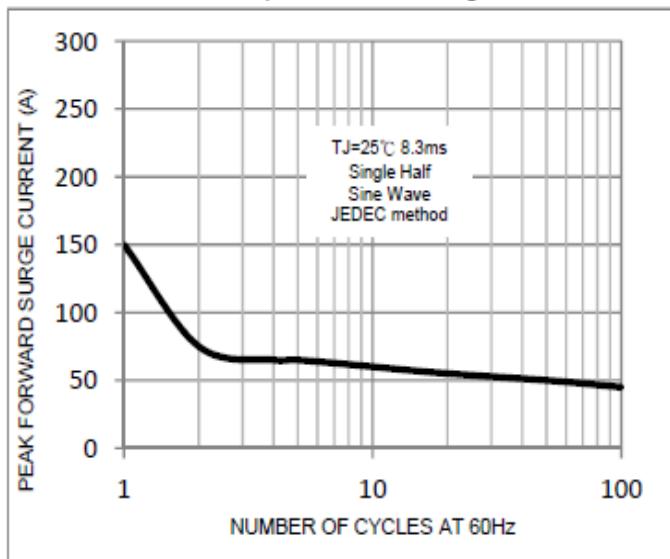


FIG. 4-Typical Reverse Characteristics

