

# **Excellent Schottky Rectifier**

REVERSE VOLTAGE - 45 Volts FORWARD CURRENT - 10.0 Amperes

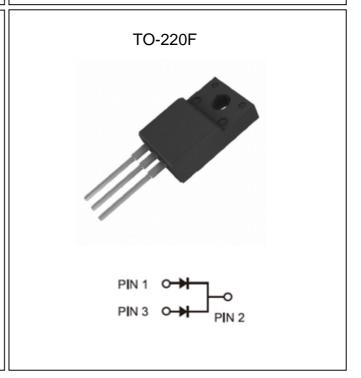
### **FEATURES**

- · 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-220FPolarity: As marked

Weight: Approximated 1.6 grams



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at  $25^{\circ}$ 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 <sub>F</sub> =2A (T <sub>J</sub> =25°C)	V <sub>F</sub>	Typ. 0.38	Max.	V
I <sub>F</sub> =5 A (T <sub>J</sub> =25°C)		0.43	0.48	
Maximum Reverse Current at Rated $V_{RRM}$ $T_J$ =25°C $T_J$ =125°C	I <sub>R</sub>	Max. 500 20		μA mA
Maximum Average Forward Rectified Current Total device Per diode	Io	10 5		А
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	100		А
Peak Repetitive Reverse Current at tp=2 µs, 1 kHz,	I <sub>RRM</sub>	1.0		Α
Operating and StorageTemperature Range	$T_{J,}T_{STG}$	-55 to +150		°C



## **Rating and Characteristic Curves**

FIG. 1-Typical Forward Current Derating Curve

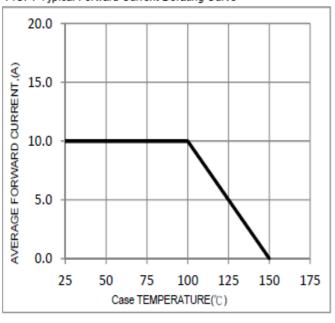


FIG. 2-Typical Forward Characteristics

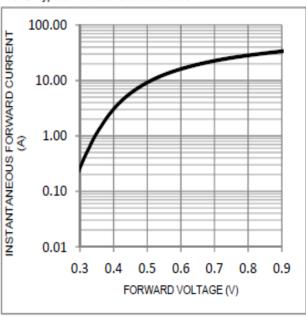


FIG. 3-Maximum Non-Repetitive Forward Surge Current

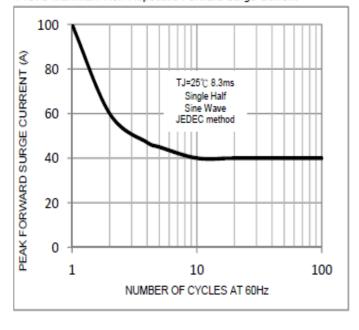


FIG. 4-Typical Reverse Characteristics

