

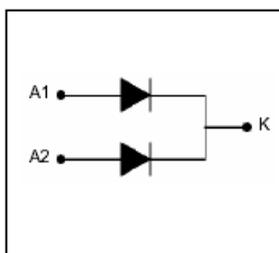
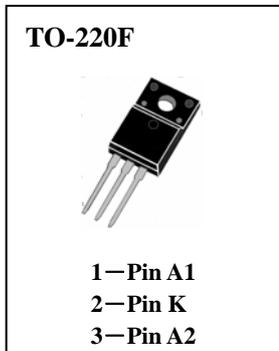


## 10A HIGH VOLTAGE SCHOTTKY BARREIER RECTIFIER

### ■ Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage,High Frequency Inverters,Free Wheelings, and Polarity Protection Applications

### ■ Package



### ■ Maximum Ratings

- $T_{stg}$ —Storage Temperature..... -65~150°C
- $T_j$ —Operating Temperature ..... -65~150°C
- $V_{RRM}$ —Peak Repetitive Reverse Voltage.....100V
- $V_{RWM}$  — Working Peak Reverse Voltage..... 100V
- $V_R$ —DC Blocking Voltage.....100V
- $V_{R(RMS)}$  —RMS Reverse Voltage..... 70V
- $I_{F(AV)}$  —Average Recified Output Current@ $T_c=100^\circ C$ .....Double Dies 10A  
     ◆ (Note 1) .....Single Die 5A
- $I_{FSM}$ —Non-Repetitive Peak Forward Surge Current (Single Die, 60Hz) .....120A

### ■ Electrical Chatacteristic@ $T_a=25^\circ C$ unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load.

For capacitive load,derate current by 20%.

Characteristic	Symbol	Min	Max	Unit	Condition
Forward Voltage Drop	$V_{FM}$		0.75	V	$I_F=5A, T_C=125^\circ C$
			0.85		$I_F=5A, T_C=25^\circ C$
			0.85		$I_F=10A, T_C=125^\circ C$
			0.95		$I_F=10A, T_C=25^\circ C$
Peak Reverse Current at Rated DC Blocking Voltage	$I_{RM}$		0.1 50	mA	$V_R = V_{RRM} \quad T_C=25^\circ C$ $T_C=125^\circ C$
Typical Junction Capacitance(Note 2)	$C_j$		300	pF	
Typical Thermal Resistance Junction to Case(Note 1)	$R_{th-j}$		4.0	$^\circ C/W$	
Voltage Rate Of Change	$dV/dt$		10000	V/s	
Isolation Breakdown Voltage(heatsink to surface, $t=3s$ )	$V_{iso}$		2000	V	

Notes:1、 Thermal resistance junction to case mounted on heatsink.

2、 Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.



## PERFORMANCE CURVES

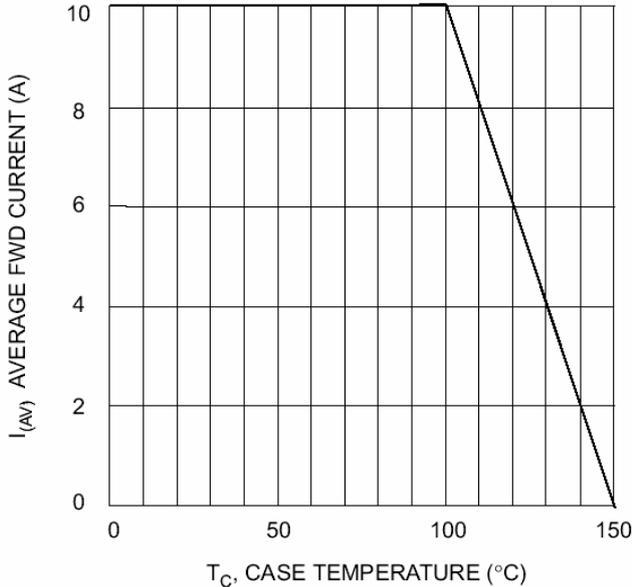


Fig. 1 Forward Current Derating Curve

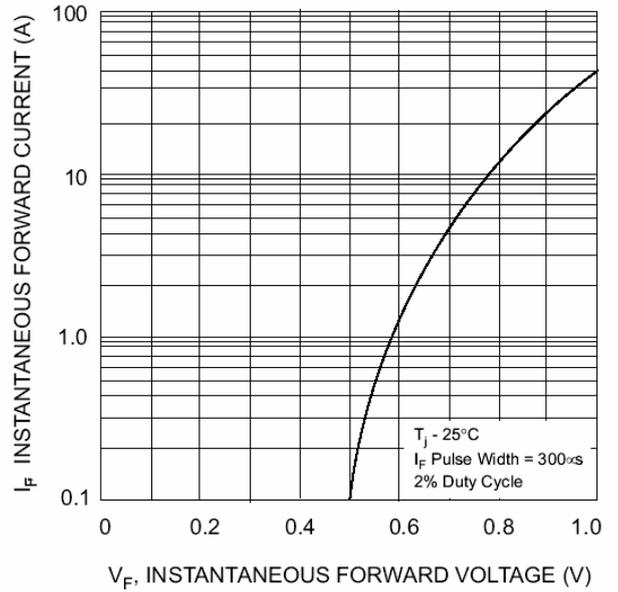


Fig. 2 Typical Forward Characteristics

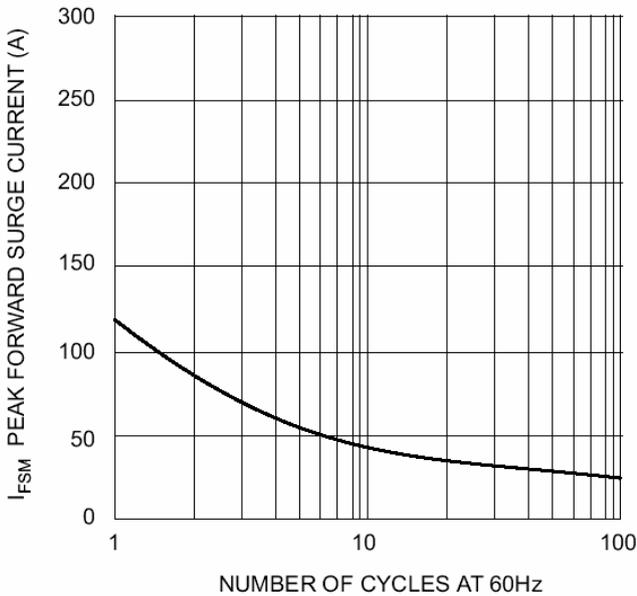


Fig. 3 Max Non-Repitative Surge Current

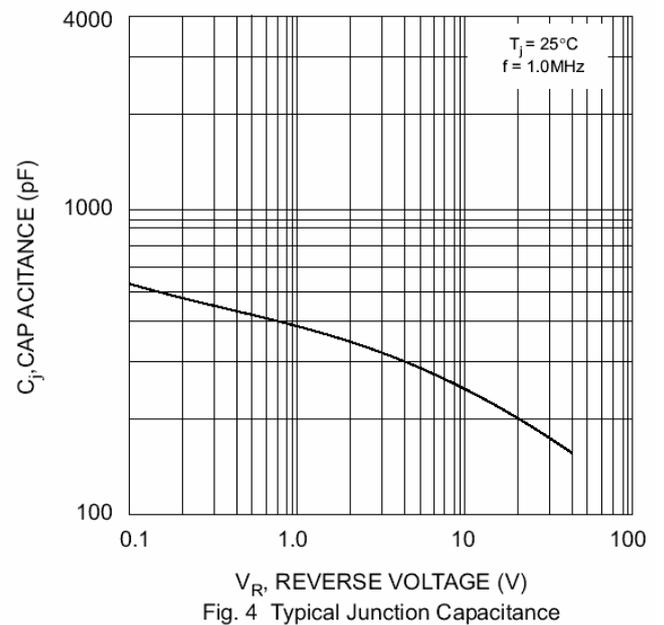


Fig. 4 Typical Junction Capacitance