



Shantou Huashan Electronic Devices Co.,Ltd.

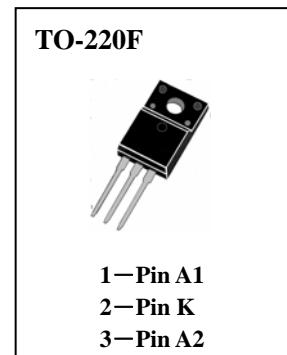
**HKF10150CT**

## 10A HIGH VOLTAGE SCHOTTKY BARREIER RECTIFIER

### ■ Features

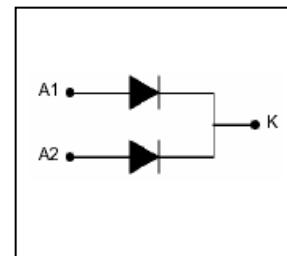
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

### ■ Package



### ■ Maximum Ratings

- $T_{stg}$ —Storage Temperature ..... -65~150°C
- $T_j$ —Operating Temperature ..... -65~150°C
- $V_{RRM}$ —Peak Repetitive Reverse Voltage ..... 150V
- $V_{RWM}$  — Working Peak Reverse Voltage ..... 150V
- $V_R$ —DC Blocking Voltage ..... 150V
- $V_{R(RMS)}$  — RMS Reverse Voltage ..... 105V
- $I_{F(AV)}$ —Average Rectified Output Current( $T_c=125^\circ\text{C}$ ) ..... Double Dies 10A  
◆ (Note 1) ..... Single Die 5A
- $I_{FSM}$ —Non-Repetitive Peak Forward Surge Current (Single Die, 60Hz) ..... 120A



### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ 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	$V_{FM}$		0.92 0.75 1.0 0.85	V	$I_F=5\text{A}, T_C=25^\circ\text{C}$ $I_F=5\text{A}, T_C=125^\circ\text{C}$ $I_F=10\text{A}, T_C=25^\circ\text{C}$ $I_F=10\text{A}, T_C=125^\circ\text{C}$
Peak Reverse Current at Rated DC Blocking Voltage	$I_{RM}$		0.1 15	mA	$V_R = V_{RRM} \quad T_c=25^\circ\text{C}$ $T_c=125^\circ\text{C}$
Typical Junction Capacitance(Note 2)	$C_j$		300	pF	
Typical Thermal Resistance Junction to Case(Note 1)	$R_{th-j}$		4.0	°C/W	
Voltage Rate Of Change	$dV/dt$		10000	V/s	
Isolation Breakdown Voltage(heatsink to surface, $t=3\text{s}$ )	$V_{iso}$		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.



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## ■ PERFORMANCE CURVES

