

Shantou Huashan Electronic Devices Co.,Ltd.

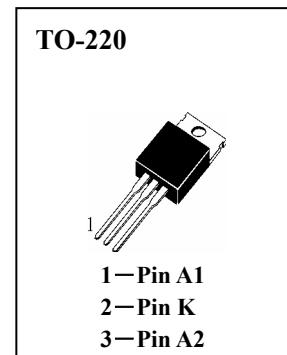
HJP10100CT

10A HIGH VOLTAGE SCHOTTKY BARREIER RECTIFIER

■ Features

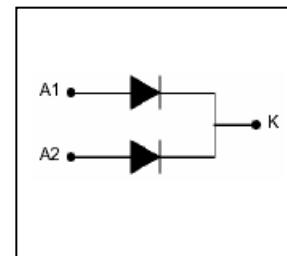
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheelings, and Polarity Protection Applications

■ Package



■ Maximum Ratings

- T_{stg} — Storage Temperature $-65\text{--}150^\circ\text{C}$
- T_j — Operating Temperature $-65\text{--}150^\circ\text{C}$
- V_{RRM} — Peak Repetitive Reverse Voltage 100V
- V_{RWM} — Working Peak Reverse Voltage 100V
- V_R — DC Blocking Voltage 100V
- $V_{R(\text{RMS})}$ — RMS Reverse Voltage 70V
- $I_{F(AV)}$ — Average Rectified Output Current@ $T_c=100^\circ\text{C}$ 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

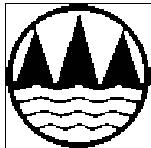
Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	Min	Max	Unit	Condition
Forward Voltage Drop	V_{FM}		0.75 0.85 0.85 0.95	V	$I_F=5\text{A}, T_C=125^\circ\text{C}$ $I_F=5\text{A}, T_C=25^\circ\text{C}$ $I_F=10\text{A}, T_C=125^\circ\text{C}$ $I_F=10\text{A}, T_C=25^\circ\text{C}$
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}		0.1 50	mA	$V_R = V_{RRM}, T_C=25^\circ\text{C}$ $T_C=125^\circ\text{C}$
Typical Junction Capacitance (Note 2)	C_J		300	pF	
Typical Thermal Resistance Junction to Case (Note 1)	R_{th-j}		3.0	°C/W	
Voltage Rate Of Change	dV/dt		10000	V/s	

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

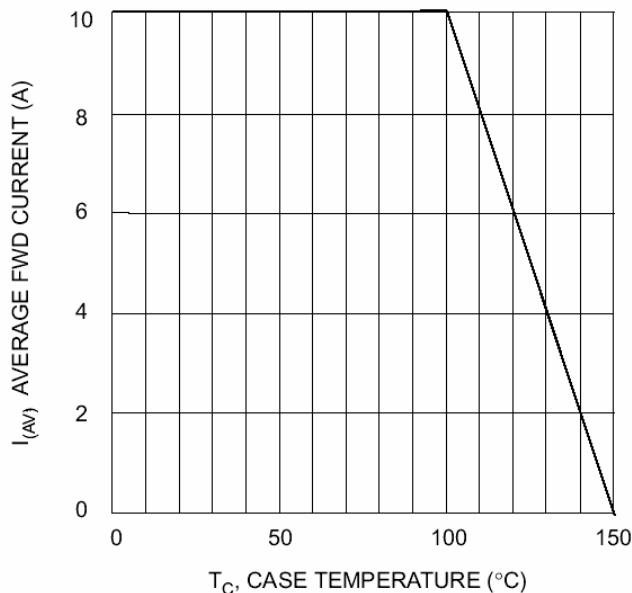


Fig. 1 Forward Current Derating Curve

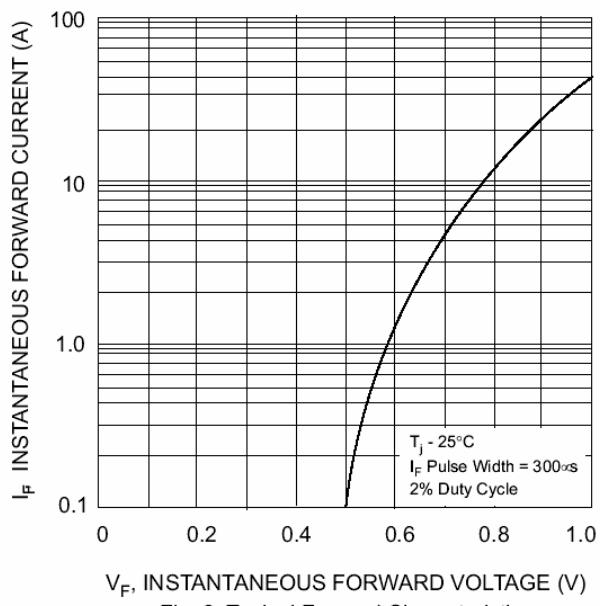


Fig. 2 Typical Forward Characteristics

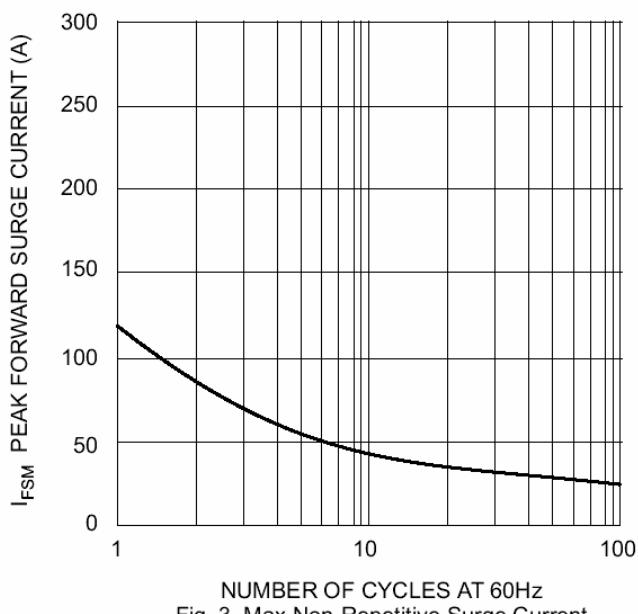


Fig. 3 Max Non-Repetitive Surge Current

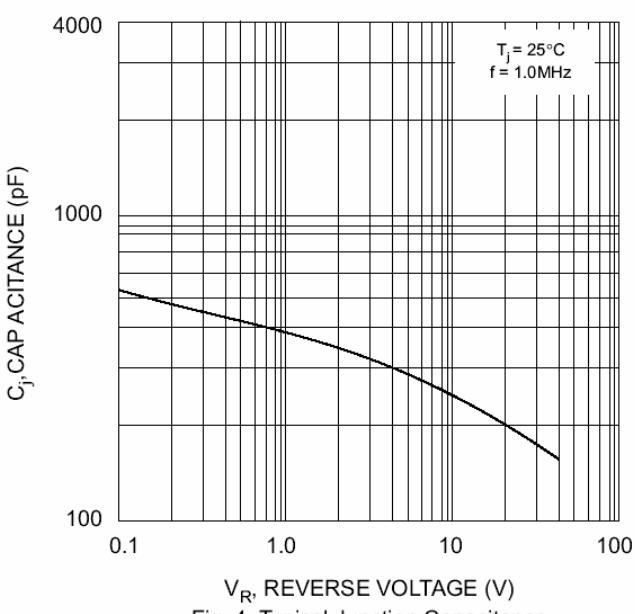


Fig. 4 Typical Junction Capacitance