Shantou Huashan Electronic Devices Co.,Ltd.

HKP3040CT

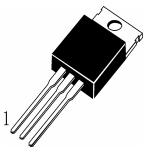
30A SCHOTTKY BARREIER RECTIFIER

Features

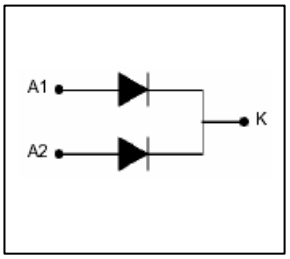
- **30 Amps Total (15 Amps Per Diode Leg)**
- **Guard Ring Die Construction for Transient Protection**
- **Low Power Loss,High Efficiency**
- **High Surge Capability**
- **High Current Capability and Low Forward Voltage Drop**
- **For Use in Low Voltage,High Frequency Inverters,Free Wheelings ,and Polarity Protection Applications**

Package

TO-220



1—Pin A1
2—Pin K
3—Pin A2



Maximum Ratings

- **T_{stg}——Storage Temperature…… -55~150℃**
- **T_j——Operating Temperature…… -55~150℃**
- **V_{RRM}——Peak Repetitive Reverse Voltage……40V**
- **V_{RWM} ——Working Peak Reverse Voltage……40V**
- **V_R——DC Blocking Voltage……40V**
- **$V_{R(RMS)}$ ——RMS Reverse Voltage……28V**
- **$I_{F(AV)}$ ——Average Recified Output Current@T_c=95℃……Double Dies 30A**
  (Note 1) ……Single Die 15A
- **I_{FSM}——Non-Repetitive Peak Forward Surge Current(60Hz)……200A**

Electrical Chatacteristics @T_a=25℃ 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 (Note 1)	V_{FM}		0.7 0.84 0.72	V	I_F=15A,T_C=25℃ I_F=30A,T_C=25℃ I_F=30A,T_C=125℃
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}		0.2 60	mA	V_R = V_{RRM} T_C=25℃ T_C=125℃
Typical Junction Capacitance(Note 2)	Cj		1000	pF	
Typical Thermal Resistance Junction to Case(Note 3)	R_{th-j}		2.0	℃/W	

Notes: 1. Pulse Test: Pulse Width = 300 ms, Duty Cycle 2.0%.

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

3. Thermal resistance junction to case mounted on heatsink..

PERFORMANCE CURVES

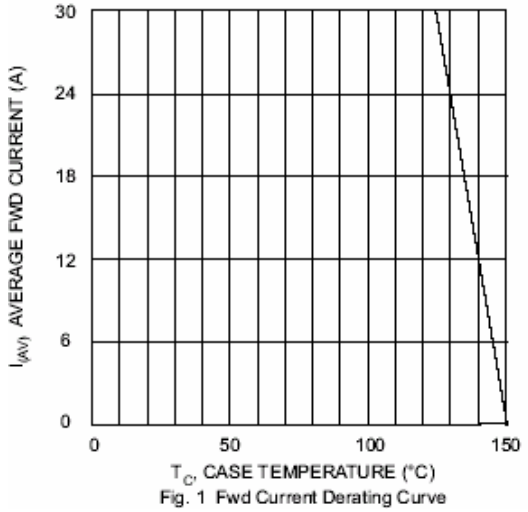


Fig. 1 Fwd Current Derating Curve

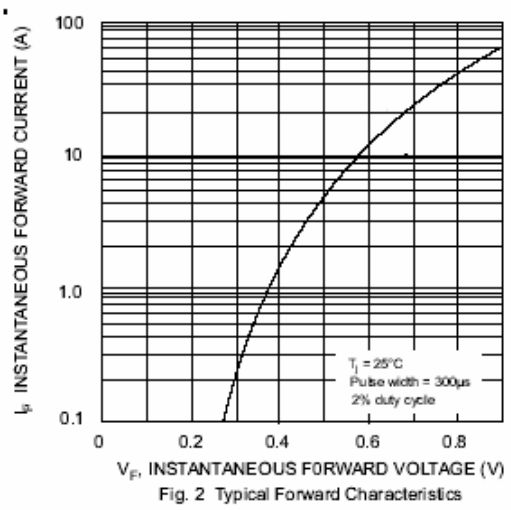


Fig. 2 Typical Forward Characteristics

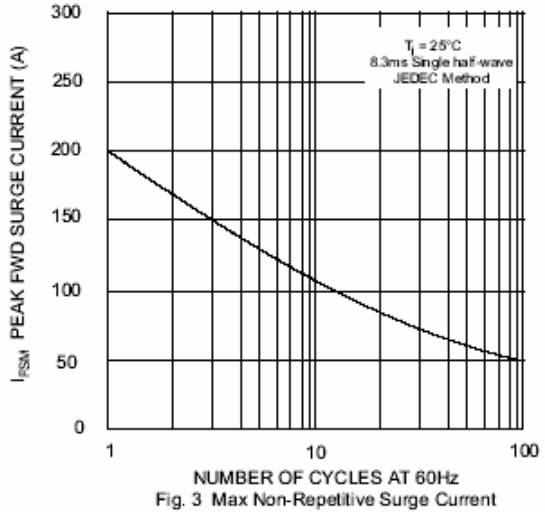


Fig. 3 Max Non-Repetitive Surge Current

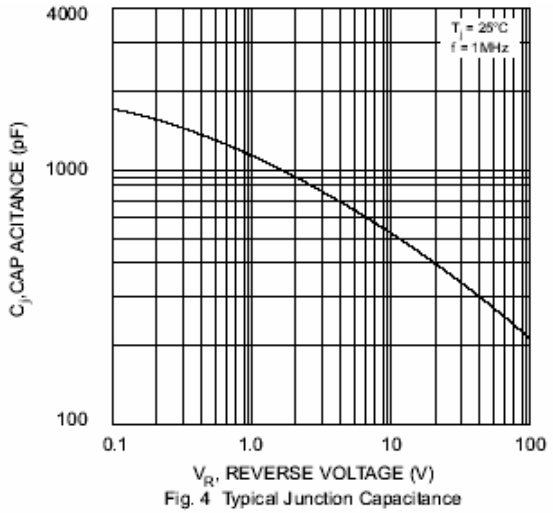


Fig. 4 Typical Junction Capacitance

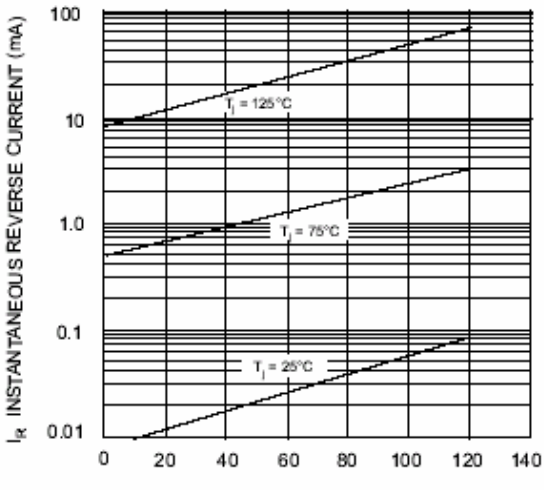


Fig. 5 Typical Reverse Characteristics