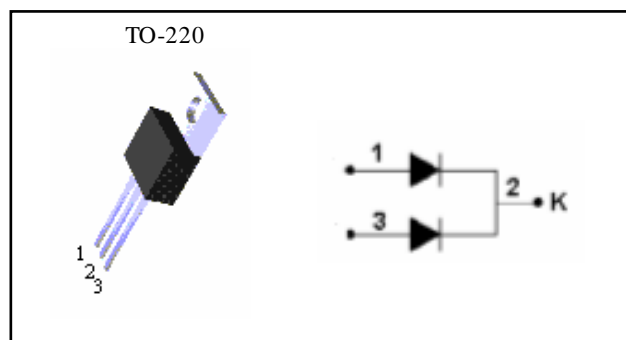


20 AMP SCHOTTKY BARRIER RECTIFIER**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- Low power loss.high efficiency
- High current capability, low V_f
- High surge capacity
- Guard ring for transient protection
- High temperature soldering guaranteed:250°C/10 Seconds/0.375"(9.5mm) lead lengths at 5 lbs(2.3Kg) tension
- For use in low voltage , high frequency inverters, free wheeling, and poparity protection applications.

**ORDERING INFORMATION**

| Device | Operating Temperature | Package |
|-----------|-----------------------|---------|
| PJ20C40CZ | -20°C ~ +85°C | TO-220 |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Parameter | Symbol | PJ20C40 | Units |
|--|-----------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 40 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | V |
| Maximum Average Forward Rectified Current See Fig.1 | $I_{(AV)}$ | 20 | A |
| Peak Forward Surge Current, 8.3ms single half Sinewave superimposed on rated load (JEDEC Method) | I_{FSM} | 180 | A |
| Maximum Instantaneous Forward Voltage Per Leg $I_f=10A, T_c=25^\circ C$ (Note 3) | V_f | 0.55 | V |
| Maximum Average Reverse Current at $T_A=25^\circ C$ Rated DC Blocking Voltage per Clement $T_A=100^\circ C$ | I_R | 1 75 | mA |
| Typical Thermal Resistance.(Note 1) | $R_{\theta JC}$ | 2 | °C/W |
| Typical Junction Capacitance (Note 2) | C_J | 1100 | PF |
| Operating Temperature Range | T_J | -25 to +125 | °C |
| Storage Temperature Range | T_{STG} | -65 to +150 | °C |

NOTES: 1. Thermal Resistance Junction to CASE.

2. Measured at 1MHz and applied reverse voltage of 4.0 volts.

3. 300 μ s Pulse Width, Duty cycle 2%.

Fig.1 Forward Current Derating Curve

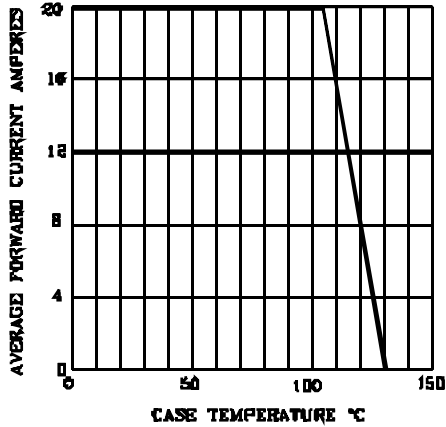


Fig.2 Typical Reverse Characteristics

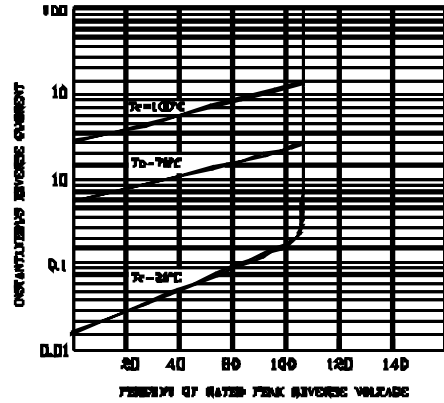


Fig.3 Maximum Non Repetitive Peak Forward Surge Current Per Element

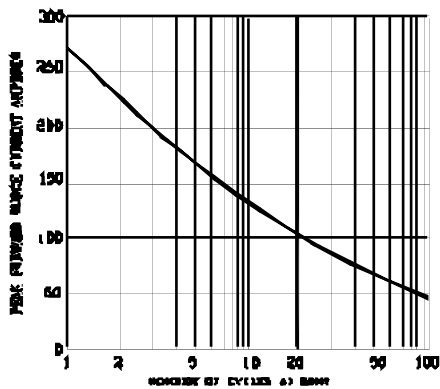


Fig.4 Typical Forward Characteristics

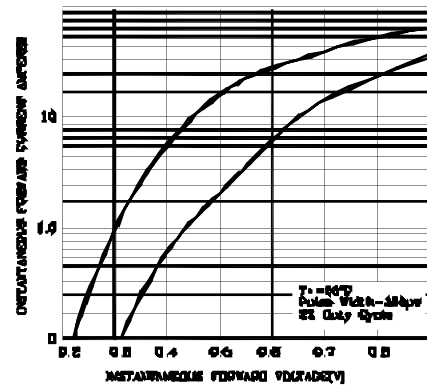
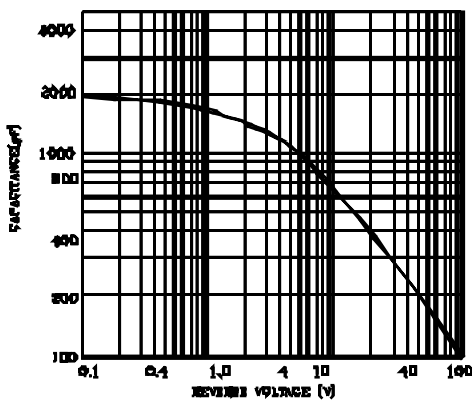


Fig. 5 Typical Junction Capacitance Per Element



TO-220 Unit:mm

