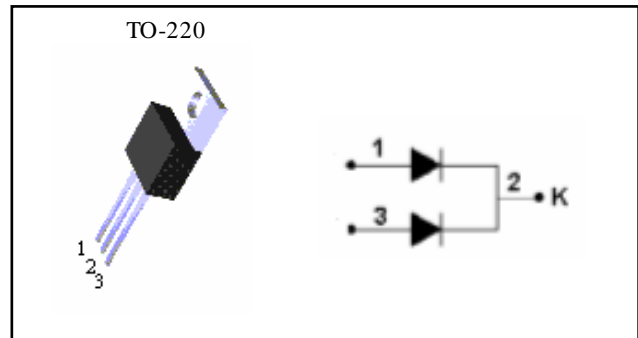


20 AMP SCHOTTKY BARRIER RECTIFIER

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 Instantanuoues Forward Voltage Per Leg $I_f=10A, T_c=25\text{ }^\circ\text{C}$ (Note 3)	V_f	0.55	V
Maximum Average Reverse Current at $T_A=25\text{ }^\circ\text{C}$ Rated DC Blocking Voltage per Clement $T_A=100\text{ }^\circ\text{C}$	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

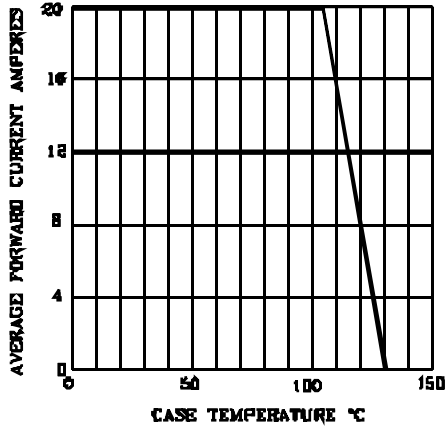


Fig.2 Typical Reverse Characteristics

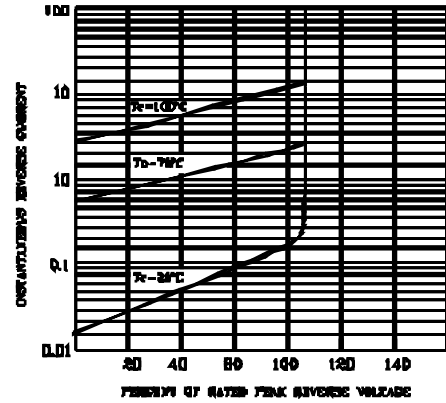


Fig.3 Maximum Non Repetitive Peak Forward Surge Current Per Element

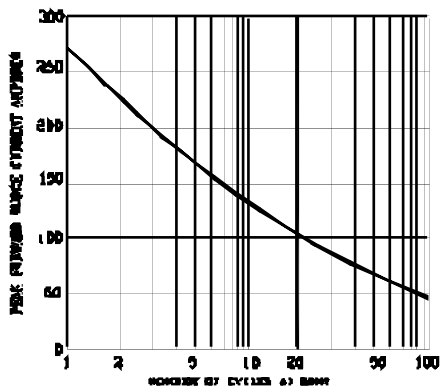


Fig.4 Typical Forward Characteristics

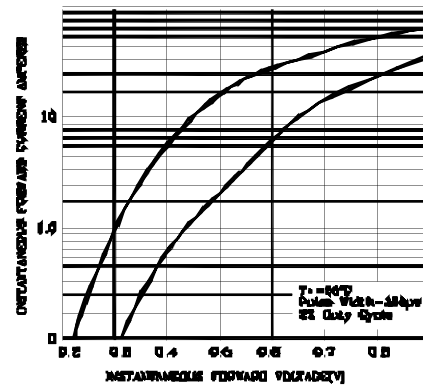
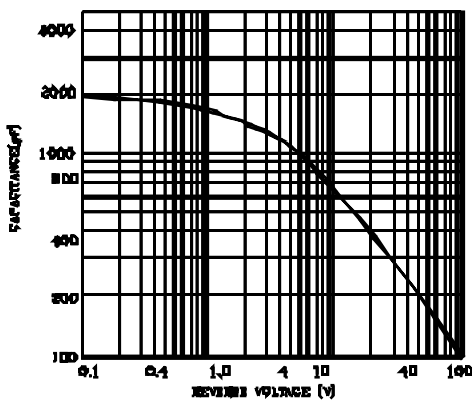


Fig. 5 Typical Junction Capacitance Per Element



20 AMP SCHOTTKY BARRIER RECTIFIER

TO-220 Unit:mm

