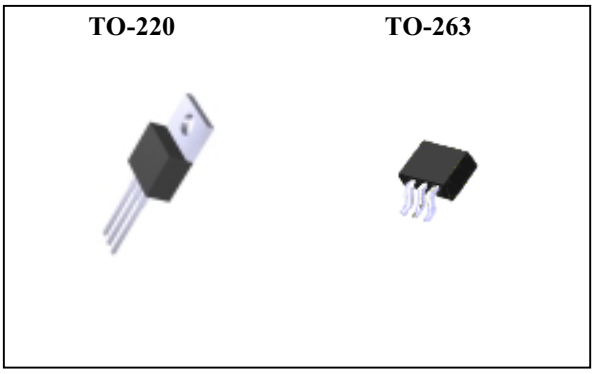
PJ10C40

10 AMP SCHOTTKY BARRIER RECTIFIERS

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 ℃ /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.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	PJ10C40	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	$I_{(AV)}$	10	A
Peak Forward Surge Current, 8.3ms single half Sinewave superimposed on rated load (JEDEC Method)	I_{FSM}	100	A
Maximum Instantanuous Forward Voltage Per Leg I_f=5A,Tc=25℃ (Note 3)	V_f	0.55	V
Maximum Average Reverse Current at T_A=25℃ Rated DC Blocking Voltage per Clement T_A=100℃	I_R	1 75	mA
Typical Thermal Resistance.(Note 1)	$R_{\theta JC}$	2	℃ /W
Typical Junction Capacitance (Note 2)	C_J	1100	PF
Operating Temperature Range	T_J	-40 to +125	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

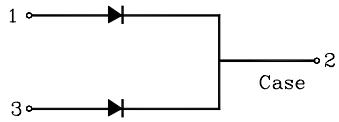
NOTES: 1. Thermal Resistance Junction to CASE.

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

3. 300 μs Pulse Width, Duty cycle 2%.

ELECTRICAL DESCRIPTION

Common Cathode 10C40



Common Anode 10A40

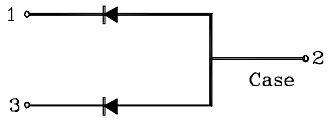


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Fig.1 Forward Current Derating Curve

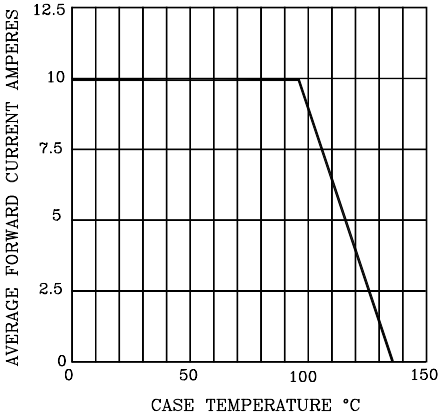

Fig.2 Typical Reverse Characteristics

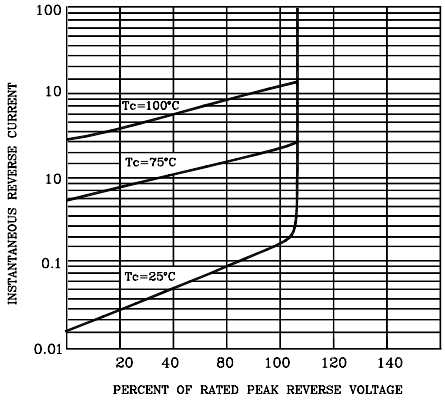

Fig.3 Maximum Non Repetitive Peak Forward Surge Current

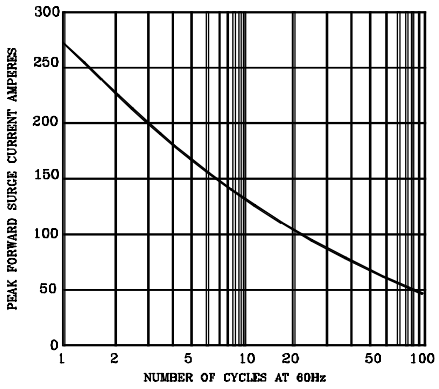

Fig.4 Typical Forward Characteristics Per Element

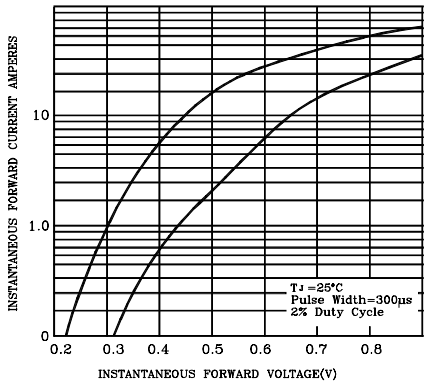

Fig.5Typical Junction Capacitance Per Element