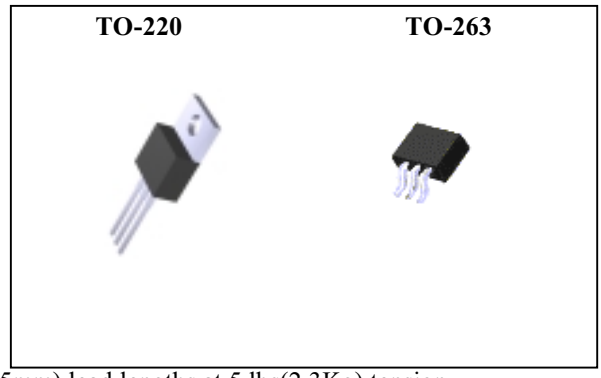
16 AMP SCHOTTKY BARRIER RECTIFIER

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℃/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	PJ16C40	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	$I_{(AV)}$	16	A
Peak Forward Surge Current, 8.3ms single half Sinewave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
Maximum Instantanuous Forward Voltage Per Leg I_f=8A,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	-25 to +125	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

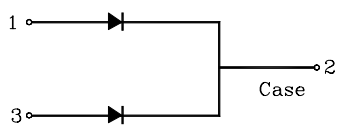
NOTES: 1. Thermal Resistance Junction to CASE.

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

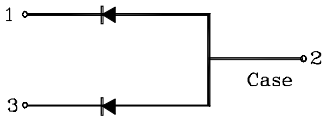
3. 300 μ s Pulse Width, Duty cycle 2%.

ELECTRICAL DESCRIPTION

Common Cathode 16C40



Common Anode 16A40



16 AMP SCHOTTKY BARRIER RECTIFIER

Fig.1 Forward Current Derating Curve

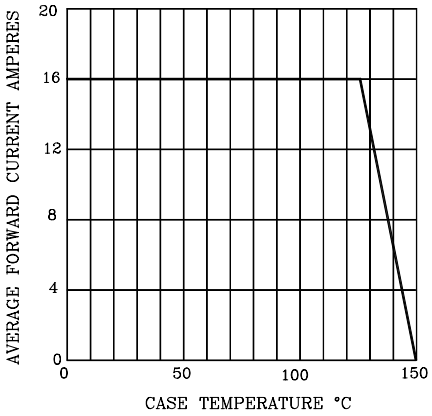


Fig.2 Typical Reverse Characteristics

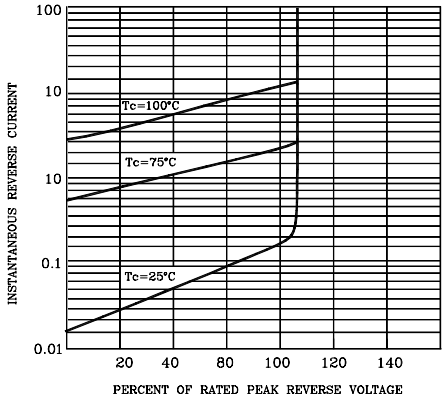


Fig.3 Maximum Non Repetitive Peak Forward Surge Current

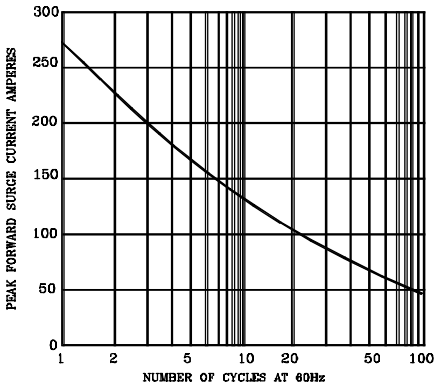


Fig.4 Typical Forward Characteristics Per Element

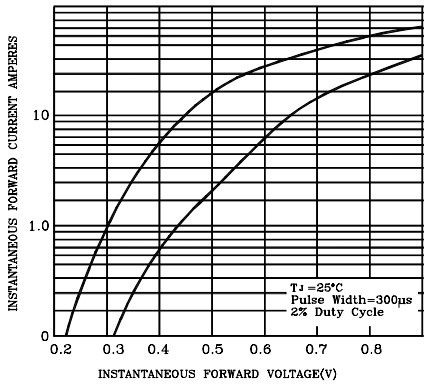
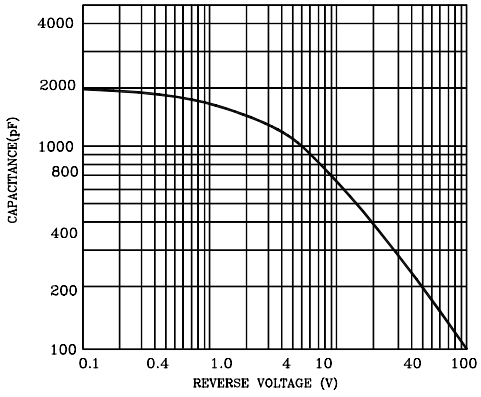



Fig.5Typical Junction Capacitance Per Element