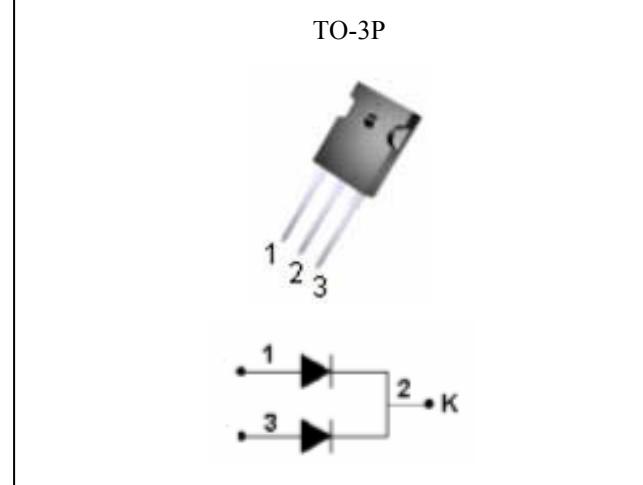


**FEATURES**

- 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 polarity protection applications.

**ORDERING INFORMATION**

Device	Operating Temperature	Package
PJ40C40CZ	-20°C ~ +85°C	TO-220
PJ40C40CI		TO-220F

**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	PJ40C40/45	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40/45	V
Maximum RMS Voltage	$V_{RMS}$	31.5	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current See Fig.1	$I_{F(AV)}$	40	A
Peak Forward Surge Current, 8.3ms single half Sinewave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400	A
Maximum Instantaneous Forward Voltage Per Leg $I_f=5A, T_c=25^\circ C$ (Note 3)	$V_f$	0.55	V
Maximum Average Reverse Current at $T_A=25^\circ C$ Rated DC Blocking Voltage per Clement $T_A=100^\circ C$	$I_R$	1.0 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	$T_J$	-40 to +125	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

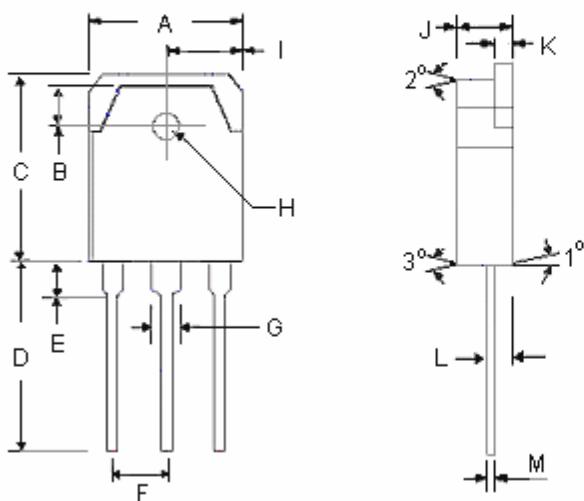
NOTES: 1. Thermal Resistance Junction to CASE.

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

3. 300 μs Pulse Width, Duty cycle 2%.

## 40 AMP SCHOTTKY BARRIER RECTIFIERS

TO-3P Unit : mm



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	15.400	15.800	0.606	0.622
B	3.600	4.000	0.142	0.157
C	19.700	20.100	0.776	0.791
D	19.800	20.200	0.780	0.795
E	3.300	3.700	0.130	0.146
F	5.250	5.750	0.207	0.226
G	2.800	3.200	0.110	0.126
H	Ø 3.000	Ø 3.400		
I	7.600	8.000	0.209	0.406
J	4.600	5.000	0.181	0.197
K	1.450	1.650	0.057	0.065
L	1.200	1.600	0.047	0.063
M	0.550	0.750	0.021	0.030