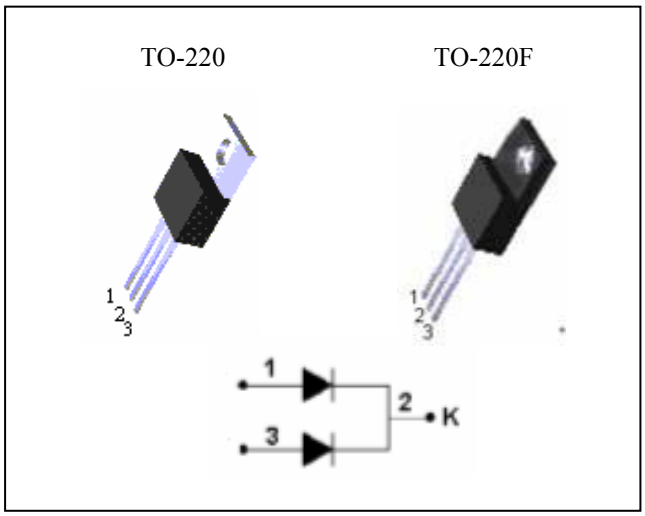
PJ10C40/45
10 AMP SCHOTTKY BARRIER RECTIFIERS

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.



ORDERING INFORMATION

Device	Operating Temperature	Package
PJ10C40/45CZ	-20℃～+85℃	TO-220
PJ10C40/45CI		TO-220F

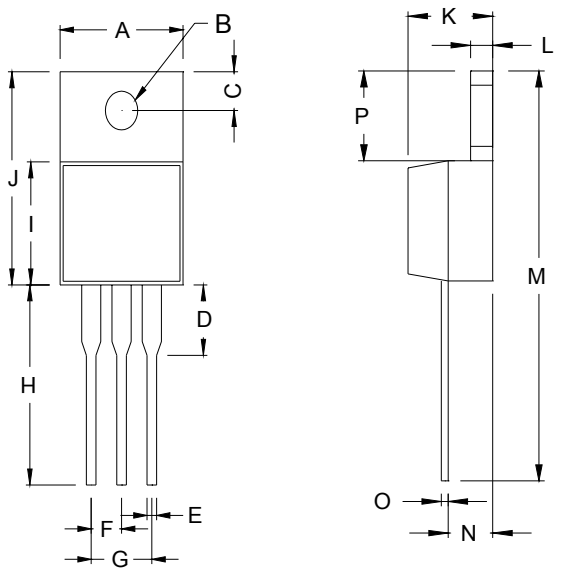
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	PJ10C40/45	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	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms single half Sinewave superimposed on rated load (JEDEC Method)	I_{FSM}	175	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°C Rated DC Blocking Voltage per Clement T_A=100℃	I_R	0.5 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	℃

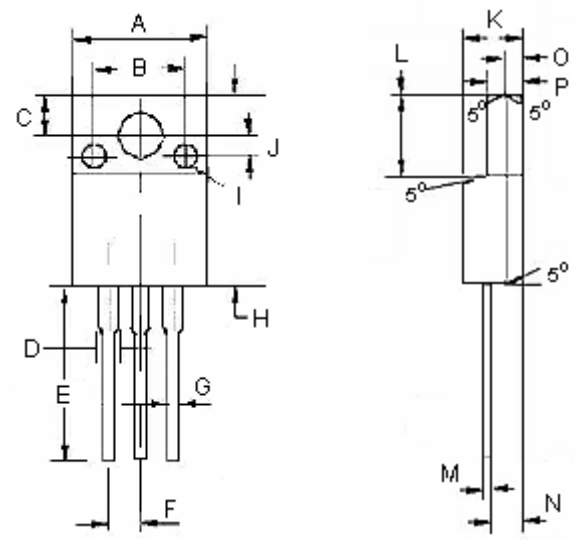
NOTES: 1. Thermal Resistance Junction to CASE.
2. Measured at 1MHz and applied reverse voltage of 4.0 volts.
3. 300 μs Pulse Width, Duty cycle 2%.

TO-220 Unit：mm



TO-220 DIMENSION				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	10.000	10.500	0.394	0.413
B	3.240	4.440	0.128	0.175
C	2.440	2.940	0.096	0.116
D	-	6.350	-	0.250
E	0.381	1.106	0.015	0.040
F	2.345	2.715	0.092	0.058
G	4.690	5.430	0.092	0.107
H	12.700	14.732	0.500	0.581
I	8.382	9.017	0.330	0.355
J	14.224	16.510	0.560	0.650
K	3.556	4.826	0.140	0.190
L	0.508	1.397	0.020	0.055
M	27.700	29.620	1.060	1.230
N	2.032	2.921	0.080	0.115
O	0.255	0.610	0.010	0.024
P	5.842	6.858	0.230	0.270

TO-220F Unit：mm



TO-220F DIMENSION				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	9.960	10.36	0.392	0.408
B	6.800	7.200	0.268	0.283
C	3.100	3.500	0.122	0.138
D	1.470		0.059	
E	12.60	13.00	0.496	0.512
F	2.340	2.740	0.092	0.108
G	0.600	1.000	0.024	0.039
H	15.67	16.07	0.617	0.633
I	2-Ø1.0 DEEP 0.10			
J	1.900	2.300	0.075	0.090
K	4.500	4.900	0.177	0.193
L	6.480	0.680	0.255	0.262
M	0.450	0.600	0.017	0.023
N	2.560	2.960	0.100	0.166
O	0.700		0.027	
P	2.340	2.740	0.092	0.107