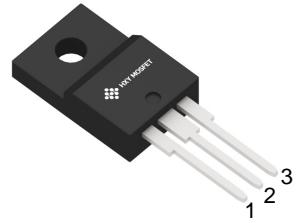


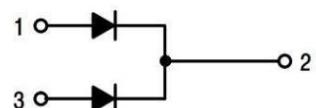


Features

- Low power loss, high efficiency.
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction.
- High current Capability, low forward voltage drop.
- Guard ring for over voltage protection.



**TO-220F
PIN CONNECTIONS**



Absolute Maximum Ratings (T_c=25°C)

Parameter	Symbol	Limit	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{R(DC)}	100	V
Maximum Average Forward Current	I _{F(AV)}	20	A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	175	A
Maximum Forward Voltage at 15A per leg	V _F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.1 20	mA mA
Maximum Operating Junction Temperature	T _j	175	°C
Storage Temperature	T _{stg}	-65~+175	°C
Typical Thermal Resistance	R _{θJC}	1.4	°C/W



Typical Characteristics

Fig. 1 - Forward Characteristics

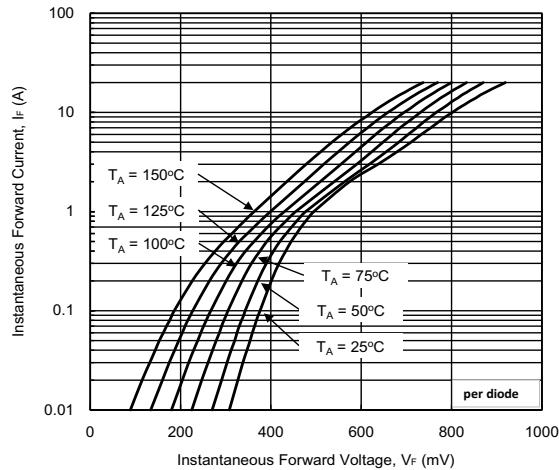


Fig. 2 - Reverse Characteristics

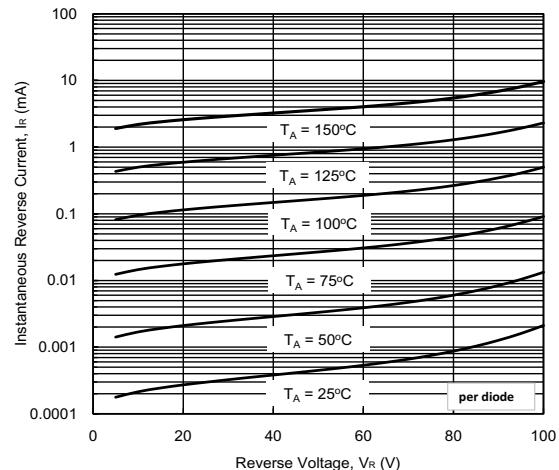


Fig. 3 - Forward Power Dissipation

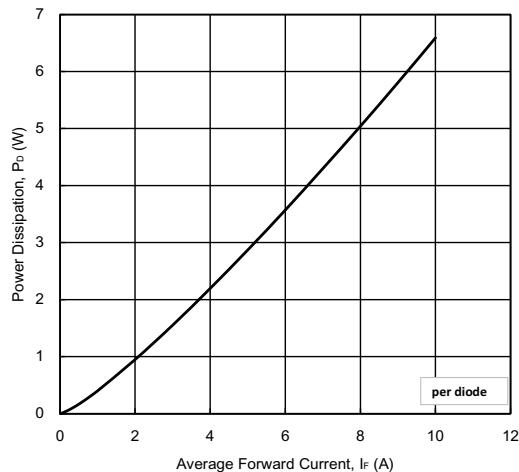


Fig. 4 - Forward Current Derating Curve

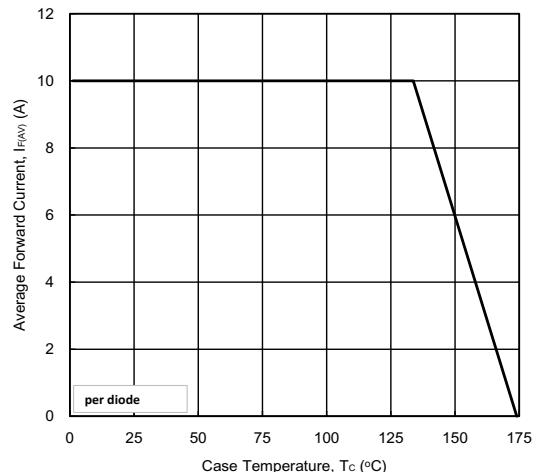
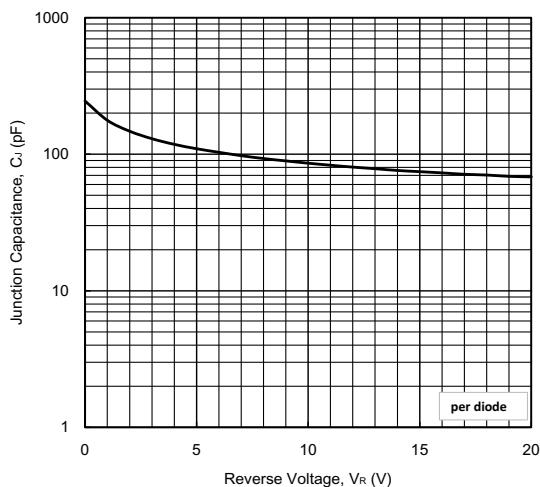
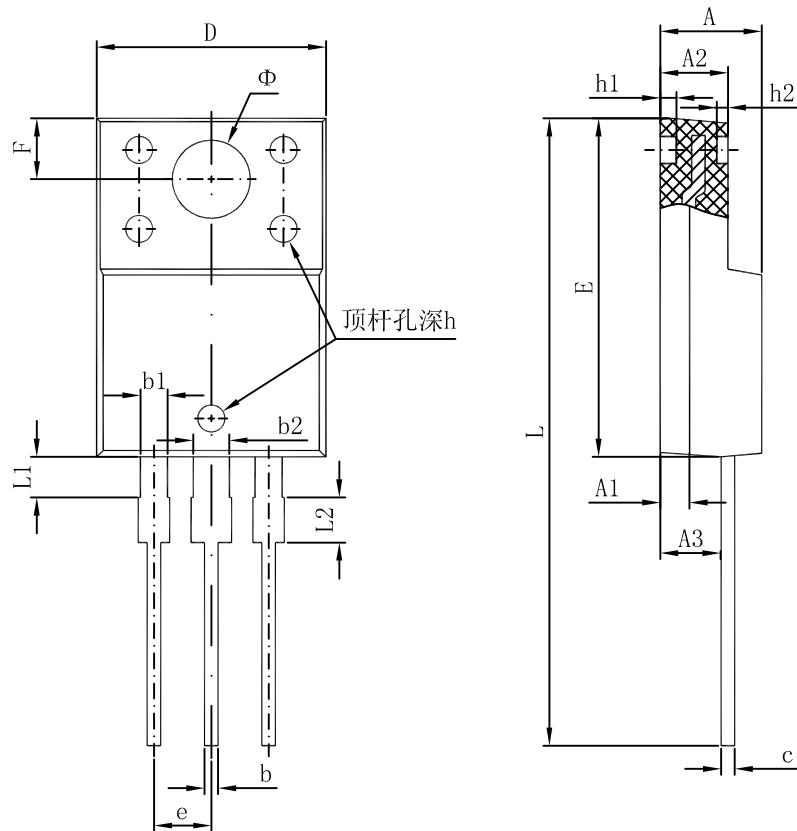


Fig. 5 - Junction Capacitance





TO-220F Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.300	4.700	0.169	0.185
A1	1.300	REF.	0.051	REF.
A2	2.800	3.200	0.110	0.126
A3	2.500	2.900	0.098	0.114
b	0.500	0.750	0.020	0.030
b1	1.100	1.350	0.043	0.053
b2	1.500	1.750	0.059	0.069
c	0.500	0.750	0.020	0.030
D	9.960	10.360	0.392	0.408
E	14.800	15.200	0.583	0.598
e	2.540	TYP.	0.100	TYP.
F	2.700	REF.	0.106	REF.
Φ	3.500	REF.	0.138	REF.
h	0.000	0.300	0.000	0.012
h1	0.800	REF.	0.031	REF.
h2	0.500	REF.	0.020	REF.
L	28.000	28.400	1.102	1.118
L1	1.700	1.900	0.067	0.075
L2	1.900	2.100	0.075	0.083



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