



Features

Low power loss,high efficiency.

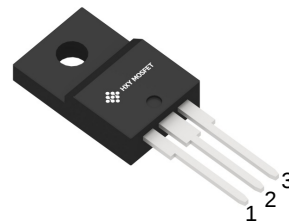
High surge capacity

For use in low voltage,high frequency inverters,
free wheeling,and polarity protection applications.

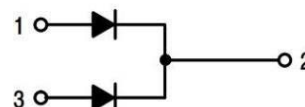
Metal silicon junction,majority carrier conduction.

High current Capability,low forward voltage drop.

Guard ring for over voltage protection.



**TO-220F
(ITO-220AB)
PIN CONNECTIONS**



Absolute Maximum Ratings (T_c=25℃)

PARAMETER		Symbol	MBRF 3040 CT	MBRF 3045 CT	MBRF 3050 CT	MBRF 3060 CT	MBRF 3080 CT	MBRF 3090 CT	MBRF 30100 CT	MBRF 30150 CT	MBRF 30200 CT	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage		V _{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage		V _{R(DC)}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current		I _{F(AV)}	30									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	200									A
Maximum Forward Voltage at 15A per leg		V _F	0.65		0.72		0.82			0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _j =25℃	I _R	0.1									mA
	T _j =125℃		20									mA
Maximum Operating Junction Temperature		T _j	150	175								℃
Storage Temperature		T _{stg}	-55~+150	-65~+175								℃
Typical Thermal Resistance		R _{θJC}	1.4									℃/W



Typical Characteristics

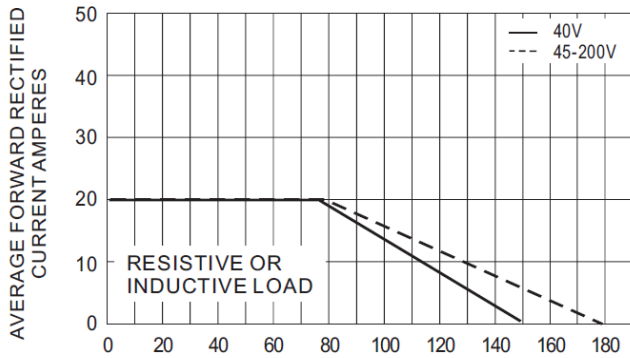


Fig.1 FORWARD CURRENT ERATING CURVE

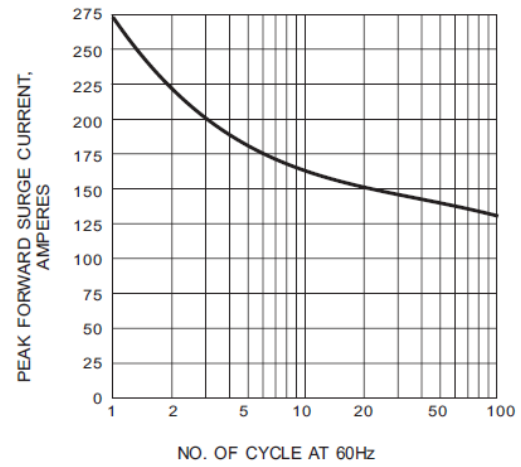


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

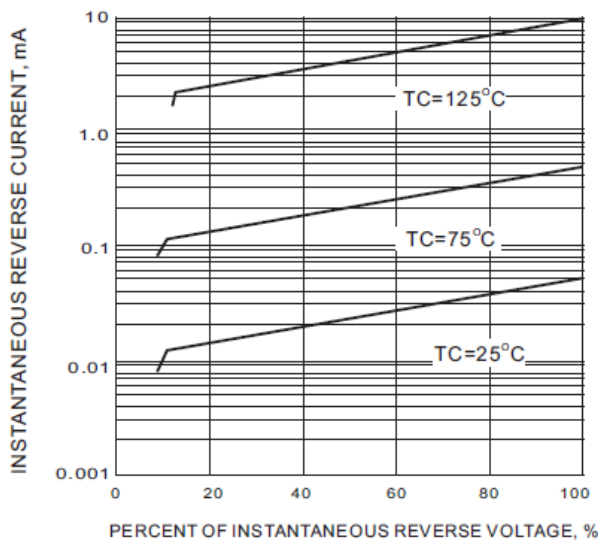


Fig.3 TYPICAL REVERSE CHARACTERISTIC

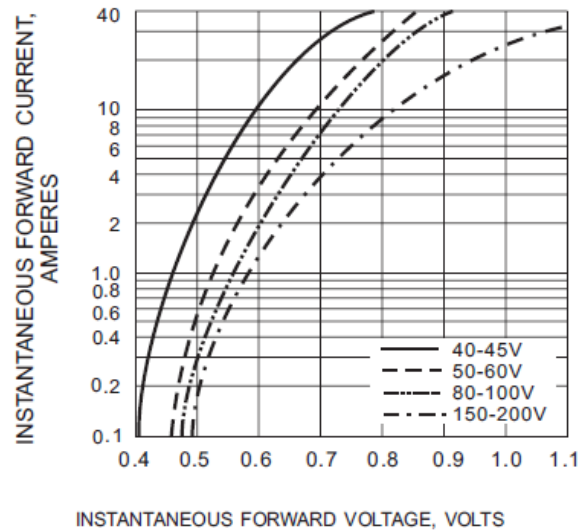
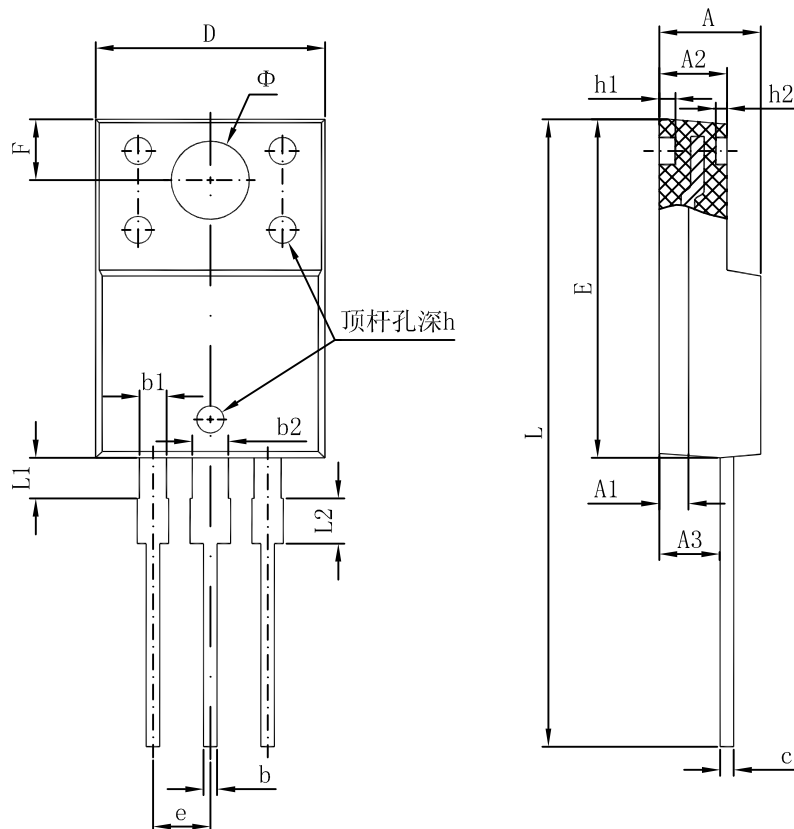


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



TO-220F(ITO-220AB) 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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