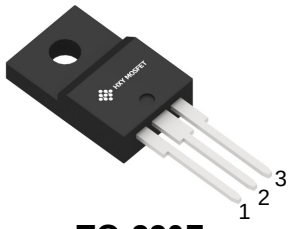
MBRF30H45CTHE3_A/P
Schottky Rectifier Diodes

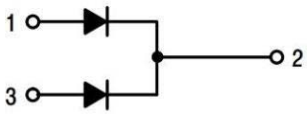
Features

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-3)

PIN CONNECTIONS



Absolute Maximum Ratings (T_C=25°C)

Parameter		Symbol	Limit	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	45	V
Maximum RMS Voltage		V_{RMS}	31.5	V
Maximum DC Blocking Voltage		$V_{R(DC)}$	45	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	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Tj=25°C	I_R	0.1	mA
	Tj=125°C		20	mA
Maximum Operating Junction Temperature		T_j	175	°C
Storage Temperature		T_{stg}	-65~+175	°C
Typical Thermal Resistance		$R_{\theta JC}$	1.4	°C/W

Typical Characteristics

FIG. 1 – FORWARD CURRENT DERATING CURVE

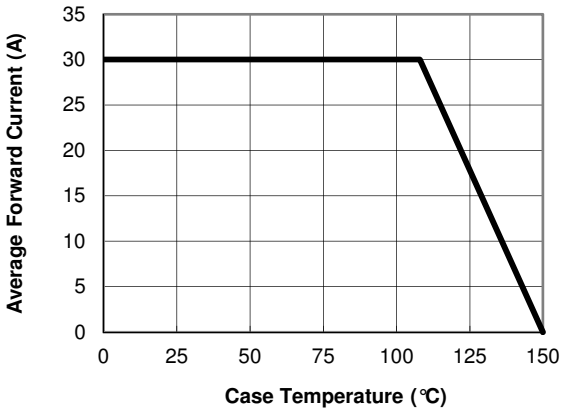


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

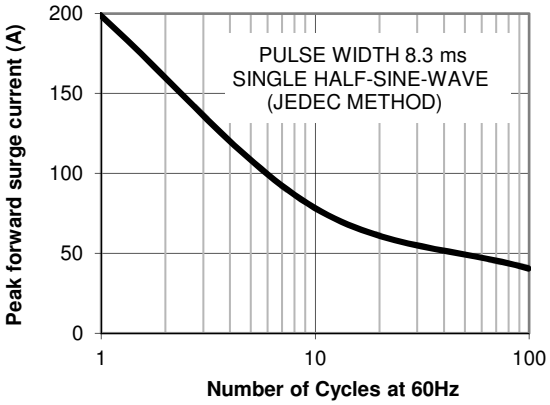


FIG.3-TYPICAL REVERSE CHARACTERISTICS

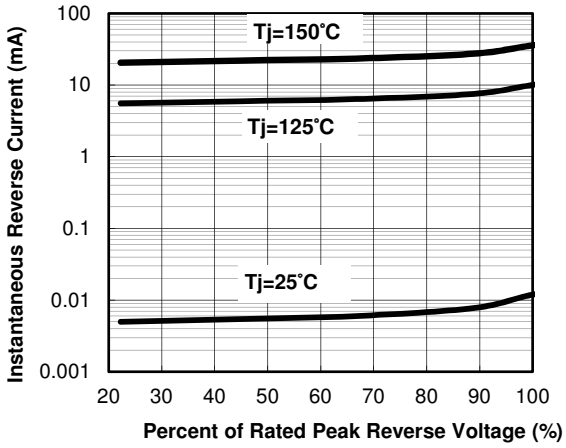
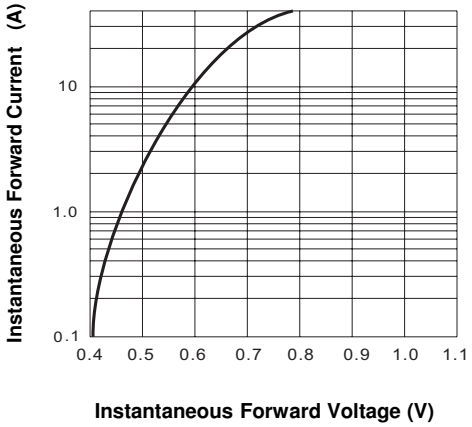
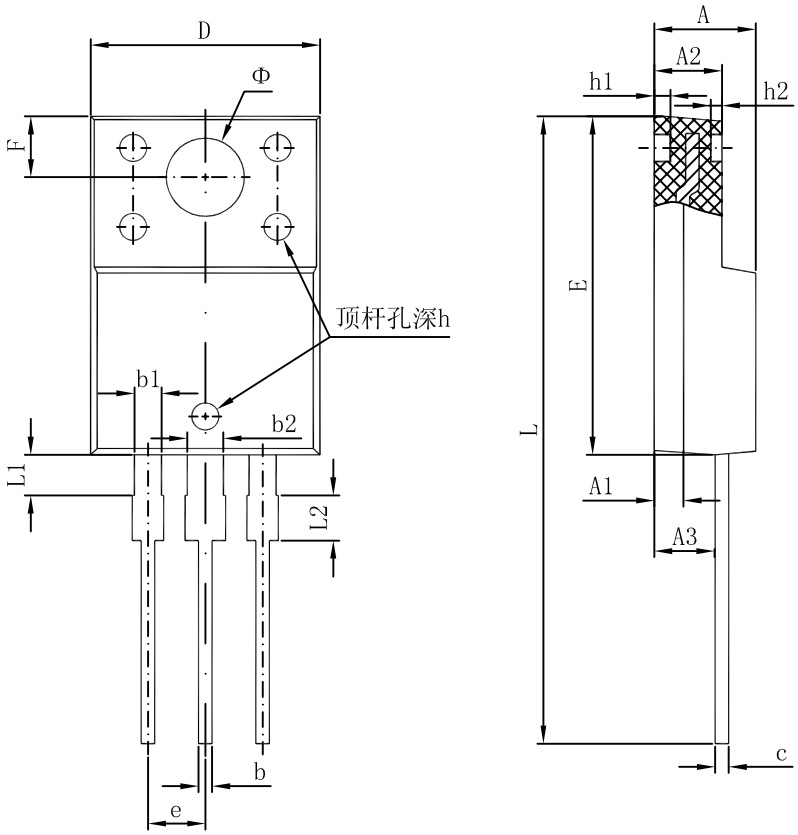


FIG.4-TYPICAL FORWARD CHARACTERISTICS



TO-220F(ITO-220AB-3) 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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HSG3D15B3.3MA PESDSC2FD5VU HAZ4007-01H HSD15C.TCT HSEN2411D3 PESDNC2XD5VBF
RLSD32A121V 60N06 AQ15C-01FTG BV05C-H HESDSLC3V3D3B HLY323BC1524L PESDLC2FD3V3BH
PJSD24CW_R1 AZ4007-01H HPTVSUC3D5VB LM393DR-HXY PESDNC2XD5VBL HCEZ36V,L3F