

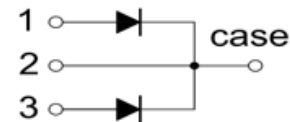


Features

Schottky Barrier Chip
Guard Ring Die Construction for Transient Protection
Low Power Loss,High Efficiency
High Surge Capability
High Current Capability and Low Forward Voltage Drop
For Use in Low Voltage, High Frequency Inverters,Free Wheeling,
and Polarity Protection Applications



TO-220F



Absolute Maximum Ratings (T_c=25°C)

Symbol	Parameter	Value			Unit
		MBR20100FCT	MBR20150FCT	MBR20200FCT	
V _{RRM}	Peak repetitive reverse voltage	100	150	200	V
V _{RWM}	Working peak reverse voltage				
V _R	DC blocking voltage				
V _{R(RMS)}	RMS reverse voltage	70	105	140	V
I _O	Average rectified output current	20			A
I _{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	150			A
P _D	Power dissipation	2			W
R _{ΘJA}	Thermal resistance from junction to ambient	50			°C/W
T _j	Junction temperature	125			°C
T _{stg}	Storage temperature	-55~+150			°C

Electrical Characteristics (T_c=25°C)

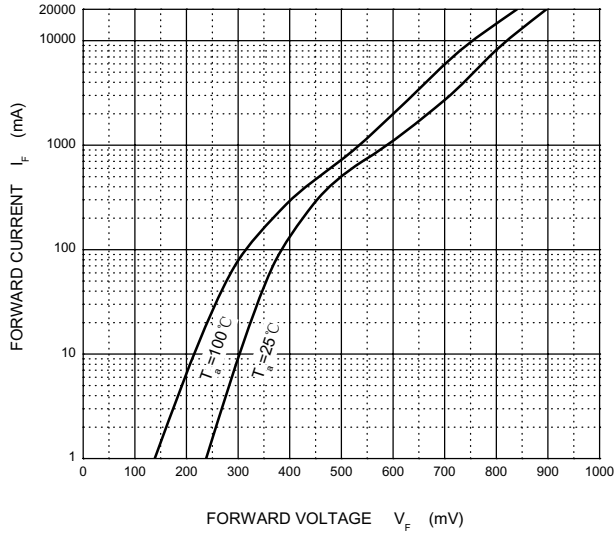
Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	MBR20100FCT	I _R =1mA	100			V
		MBR20150FCT		150			
		MBR20200FCT		200			
Reverse current	I _R	MBR20100FCT	V _R =100V			0.1	mA
		MBR20150FCT	V _R =150V			0.1	
		MBR20200FCT	V _R =200V			0.1	
Forward voltage	V _{F1}		I _F = 10A			1	V
	V _{F2} *		I _F = 20A			1.2	

*Pulst test

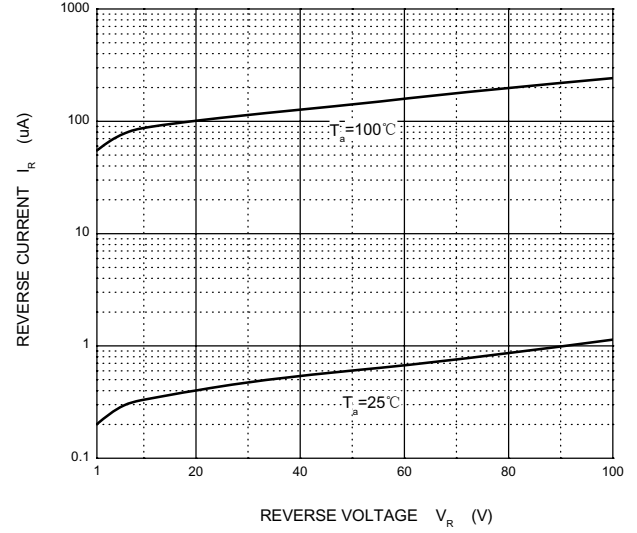


Typical Characteristics

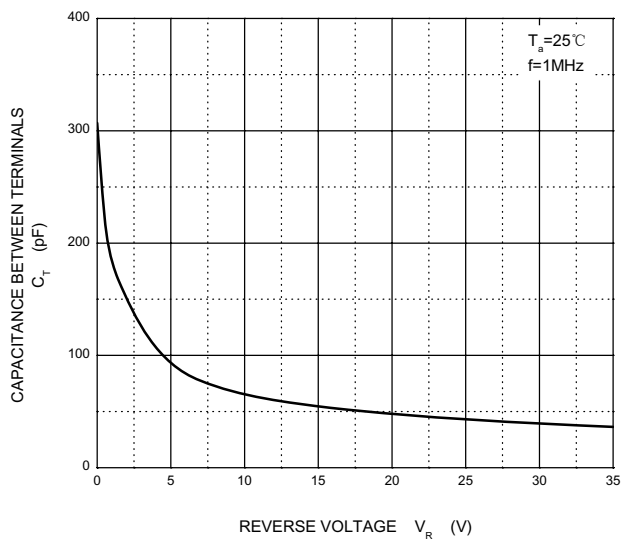
Forward Characteristics



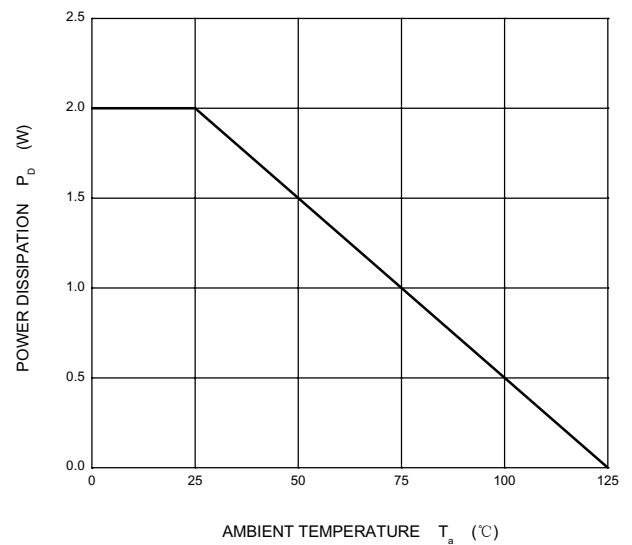
Reverse Characteristics



Capacitance Characteristics

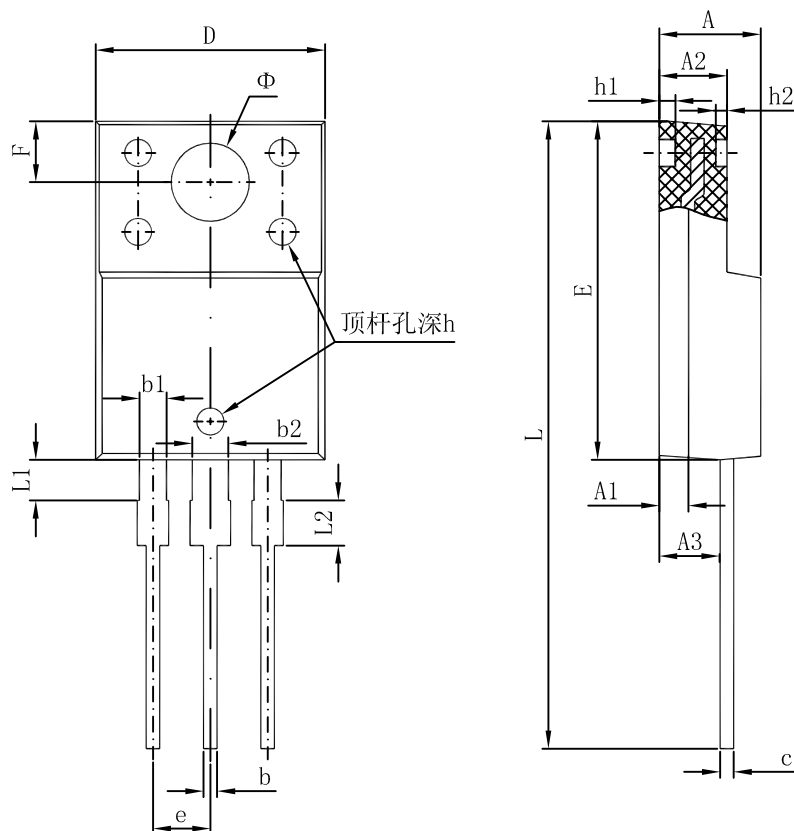


Power Derating Curve





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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