

Descriptions

The MBRF20150CT is schottky barrier diode, TO-220F plastic package.

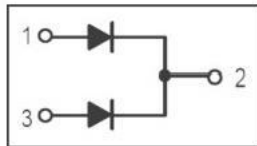
Features

- Low power loss
- high efficiency

Applications

- For use in low voltage,high frequency inverters
- Free wheeling
- polarity protection applications

Equivalent Circuit & Pinning



TO-220F

PIN1:Anode

PIN 2:Cathode

PIN 3:Anode

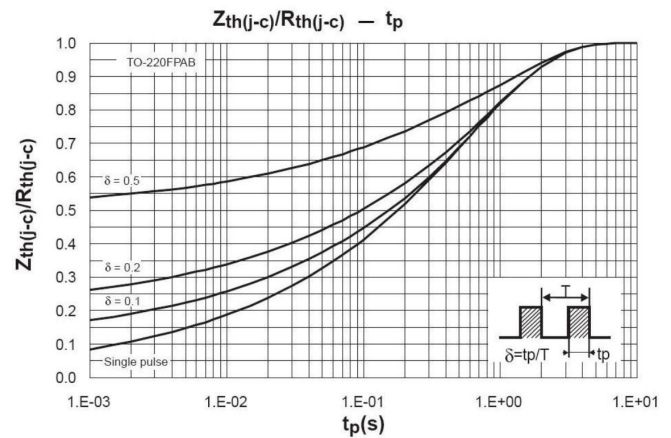
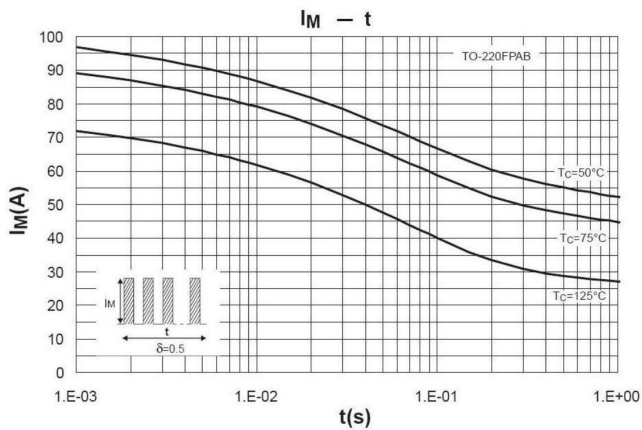
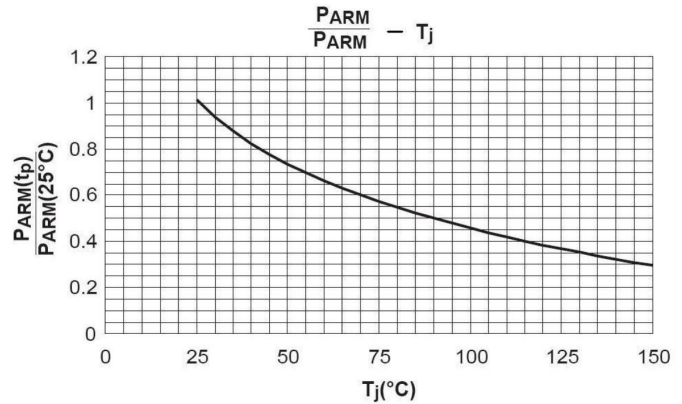
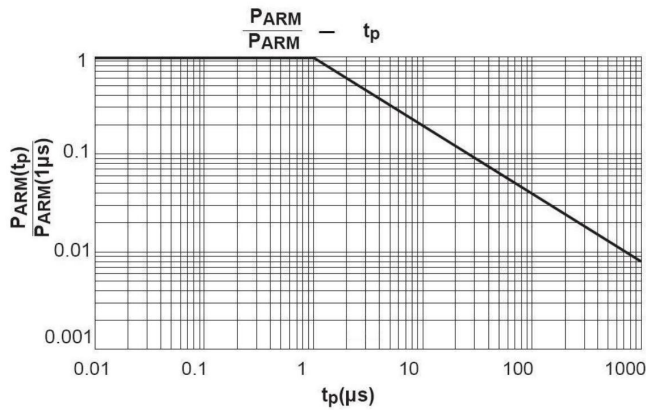
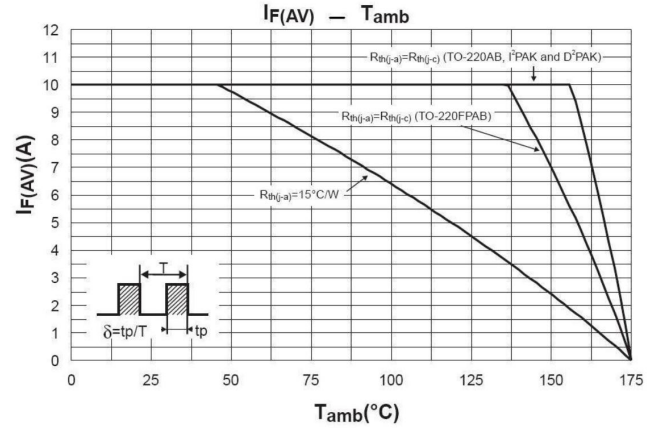
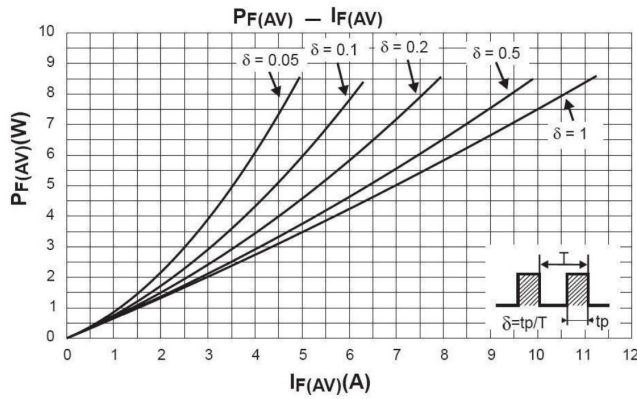
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	150	V
RMS Forward Current	$I_{F(RMS)}$	30	A
Average Forward Current	$I_{F(AV)}$	10	A
Average Forward Current	$I_{F(AV)}$ total device	20	A
Non Repetitive Peak Surge Current	I_{FSM}	180	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	1.5	°C/W
Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

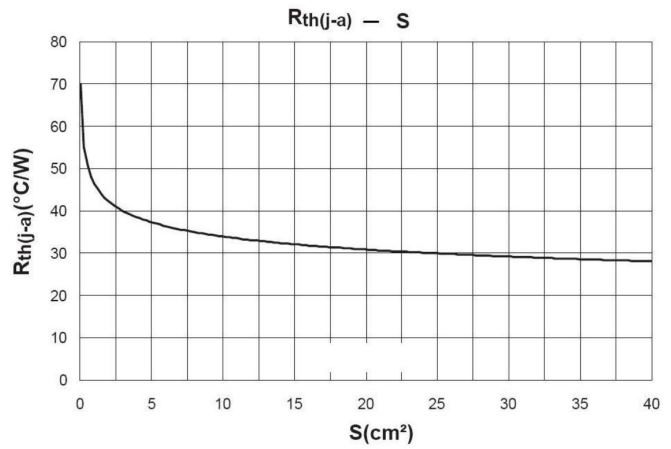
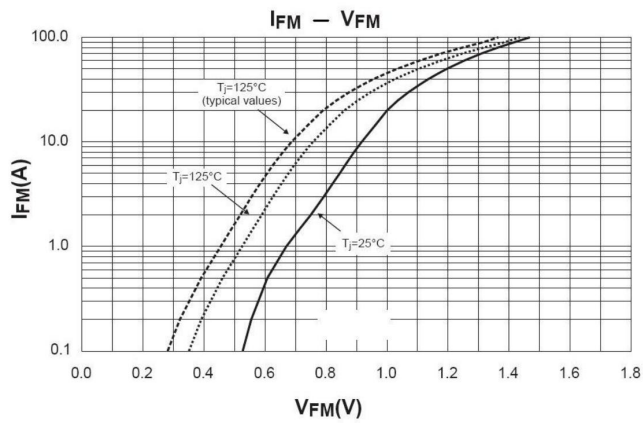
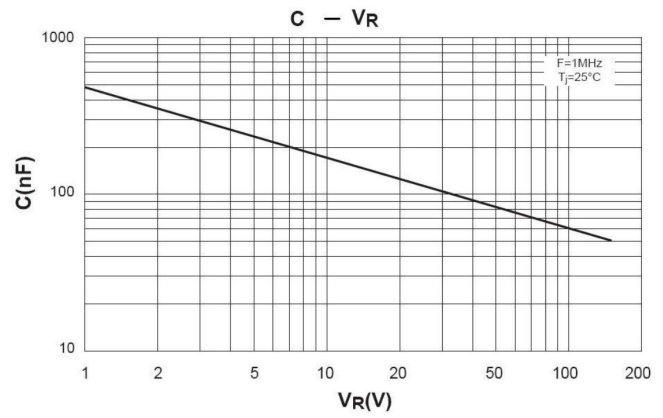
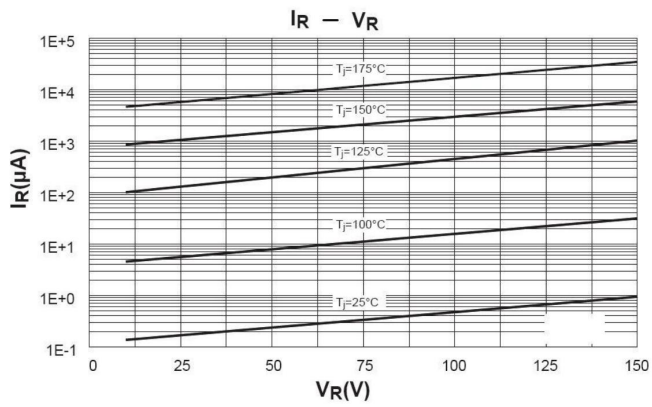
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditons	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =10A(T _c =25°C)			0.9	V
		I _F =10A(T _c =125°C)		0.69	0.75	V
		I _F =20A(T _c =25°C)			1.0	V
		I _F =20A(T _c =125°C)		0.79	0.86	V
Instantaneous Reverse Current	I _R	V _R =150V(T _c =25°C)			5.0	μA
		V _R =150V(T _c =125°C)			5.0	mA
Critical rate of rise of reverse voltage	dv/dt				10000	V/μs

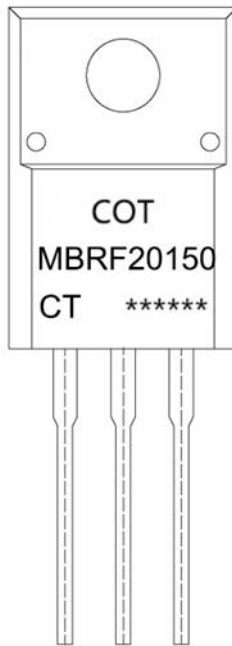
Electrical Characteristic Curve



Electrical Characteristic Curve



Marking Instructions



Note:

COT: Company Code

MBRF20150: Product Type.

CT: Internal Structure

*****: Lot No. Code, code change with Lot No.

Packaging SPEC

BULK

Package Type	Units					Dimension(unit:mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

TUBE

Package Type	Units包装数量					Dimension(unit:mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

Package Outline Dimensions

TO-220F

单位: mm

