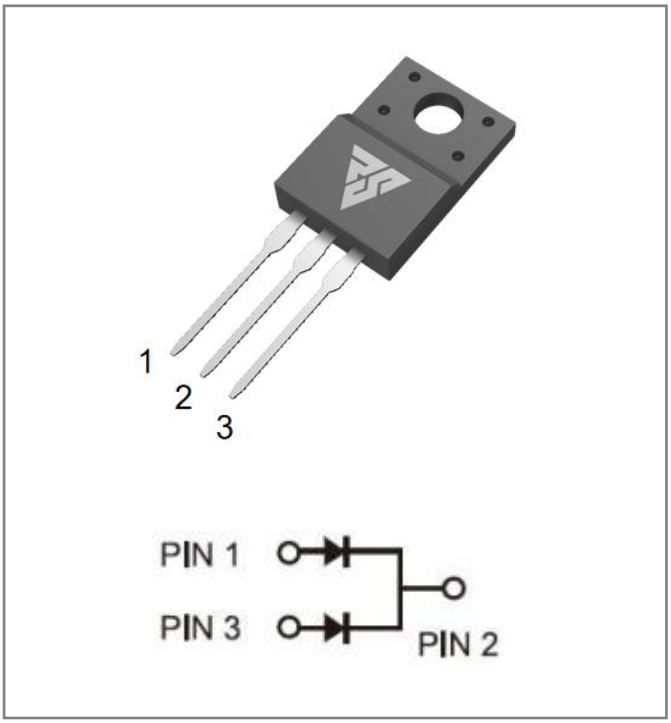
VRRM	IF (TC≤100℃)	VF (Tj≤125℃)
100V	2*15A	0.63V



Applications:

- High frequency switch Power supply
- Free wheeling diodes,Polarity protection applications

Features:

- Common cathode structure
- Low power loss, high efficiency
- High Operating Junction Temperature
- Guard ring for overvoltage protection，Highreliability
- RoHS product

Ordering Information

Part Number	Package	Marking	Packing	Qty.
MBRF30100VCT	TO-220F-3	MBRF30100VCT	Tube	50 PCS

Maximum Ratings （TJ= 25℃ unless otherwise specified）

Symbol	Parameter	Value	Unit	Test Conditions	Note
VRRM	Repetitive Peak Reverse Voltage	100	V	TC = 25℃	
VRWM	Working Peak Reverse Voltage	100	V	TC = 25℃	
VDC	Maximum DC Blocking Voltage	1500	V	TC = 25℃	
IF	Maximum Average Forward Rectified Current	15 30	A	Per Leg Total	
IFSM	Surge Non Repetitive Forward Current	220	A	TC = 25℃, tp = 8.3ms, Half Sine Wave	
Tj	Maximum Junction Temperature	150	℃		
TSTG	Storage Temperature Range	-40 to 150	℃		

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Electrical Characteristics (TJ= 25℃ unless otherwise specified)

Symbol	Parameter	Typ.	Max.	Unit	Test Conditions	Note
VF	Forward Voltage	0.58 0.56 0.67 0.63	0.66- 0.73-	V	IF = 10A, TJ = 25℃ IF = 10A, TJ = 125℃ IF = 15A, TJ = 25℃ IF = 15A, TJ = 125℃	
IR	Reverse Current	10 8	70 -	μA mA	VR = 100V, TJ = 25℃ VR = 100V, TJ = 125℃	

Thermal Characteristics (TJ= 25℃ unless otherwise specified)

Symbol	Parameter	Max	Unit	Note
RθJC	Thermal Resistance from Junction to Case	4.0	℃/W	

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Typical Feature Curve

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

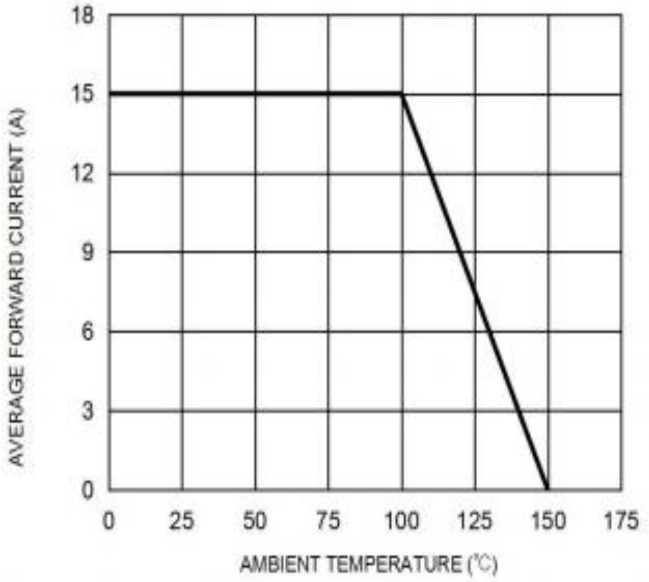


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

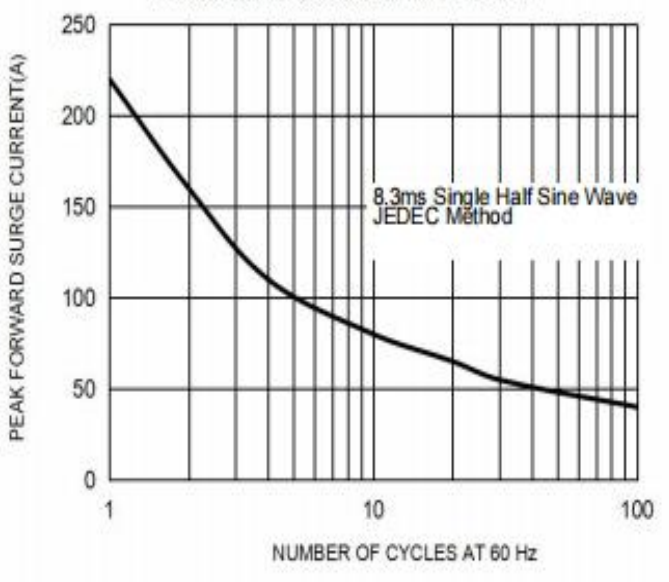


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

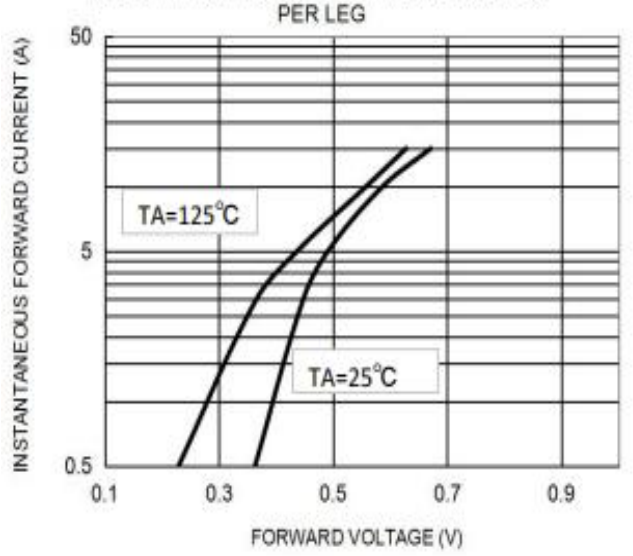
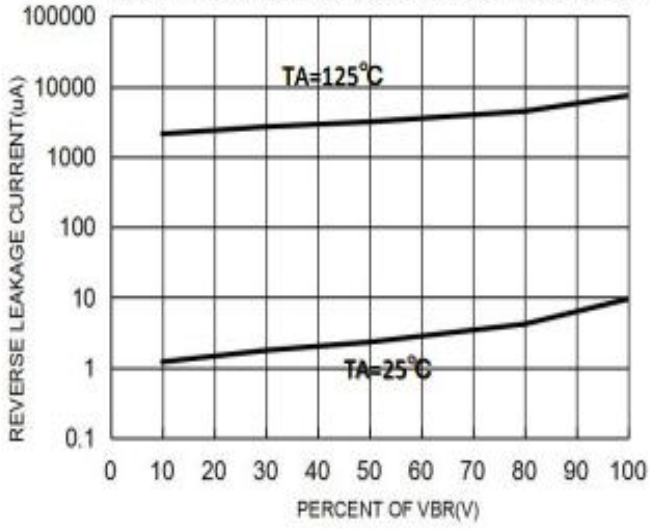
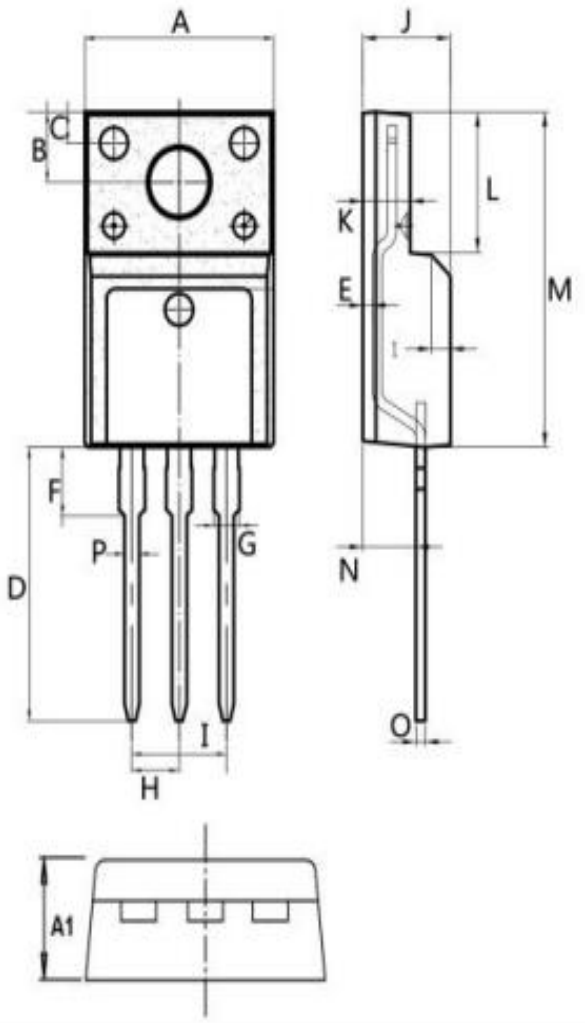


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



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Package outline drawing(TO-220F Unit: mm)



Dim.	Min.	Max.
A	9.95	10.35
A1	4.5	5.0
B	2.95	3.25
C	1.25	1.45
D	12.65	12.95
E	0.40	0.60
F	2.8	3.5
G	1.30	1.45
H	Typ 2.54	
I	Typ 5.08	
J	4.60	4.75
K	2.45	2. 65
L	6.45	6.85
M	15.4	16.0
N	2.75	3.05
O	0.45	0.55
P	0.70	0.90
All Dimensions in millimeter		

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2.A critical component is any component of a life support device or system whose failure to system whose failure to perform can be reasonably expected to cause the failure of the life support device or system,or to affect its safety or effectiveness.

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