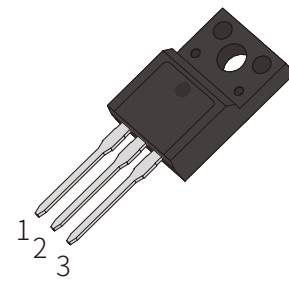


FEATURES

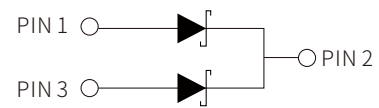
- Construction Utilizes Void-free Molded Plastic Technique
- Low Reverse Leakage
- High Forward Surge Current Capability

MECHANICAL DATA

- Case : Molded Plastic Body
- Polarity : Polarity Symbol Marking On Body
- Mounting Position : Any



TO-220F



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	MBRF20300CT	Unit
Marking		MBRF20300CT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Maximum RMS Voltage	V_{RMS}	210	V
Maximum DC Blocking Voltage	V_{DC}	300	V
Maximum Average Forward Rectified Current at $T_c=110^{\circ}\text{C}$	per device	20.0	A
	per diode	10.0	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	150.0	A
Maximum Instantaneous Forward Voltage Per Diode at 10.0A	V_F	0.95	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	50	μA
	$T_A=100^{\circ}\text{C}$	10	mA
Typical Thermal Resistance	$R_{\theta JC}$	3.5	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

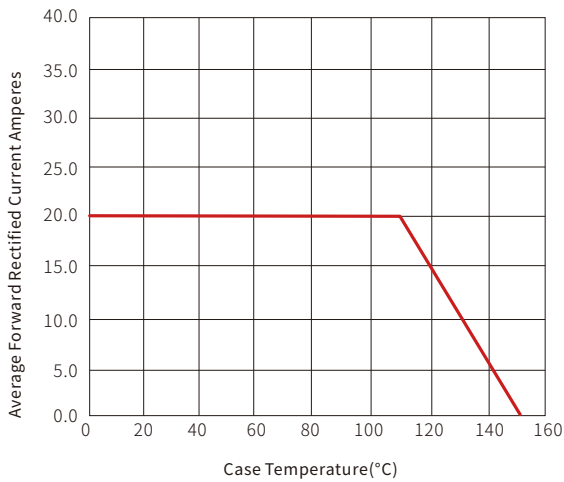


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current Perleg

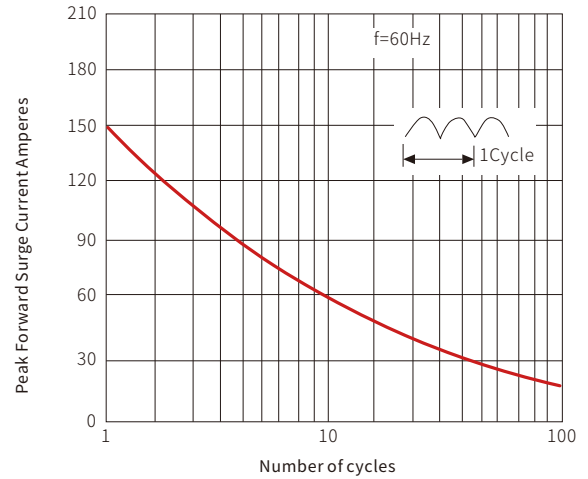


Fig. 3-Typical Forward Voltage Characteristics

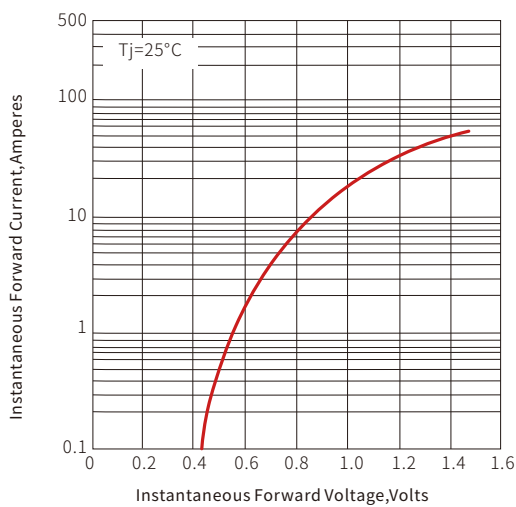
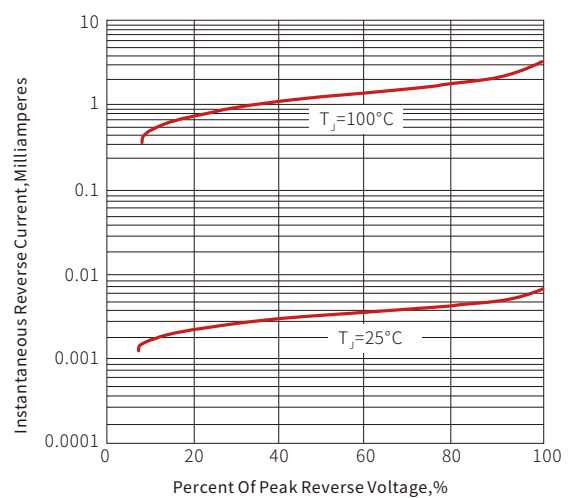
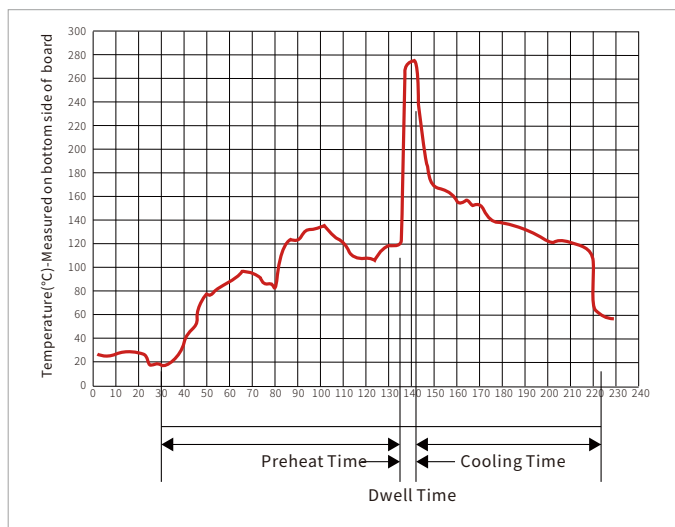


Fig. 4-Typical Reverse Leakage Characteristics

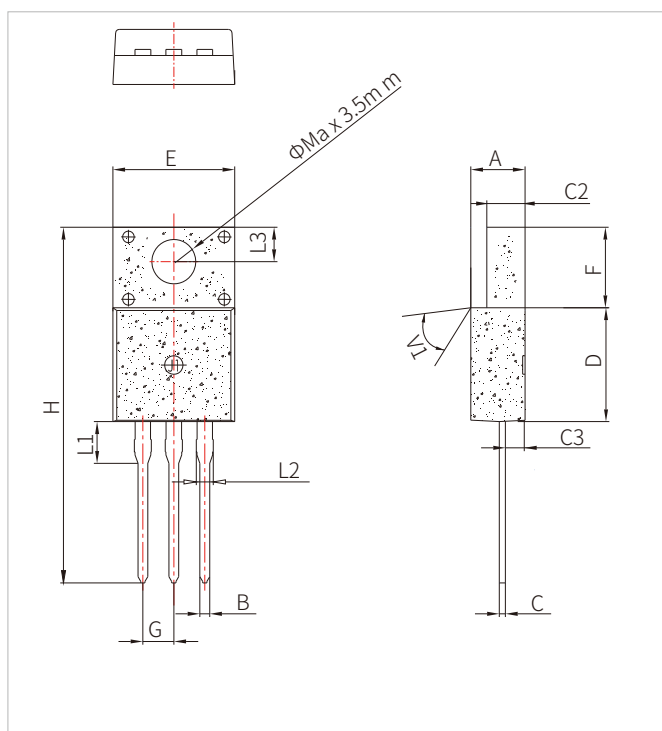


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

TO-220F PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.90	0.173		0.193
B	0.74	0.80	0.83	0.029		0.033
C	0.45		0.75	0.018		0.030
C2	2.40		2.70	0.094		0.106
C3	2.60		3.00	0.102		0.118
D	8.80		9.30	0.346		0.366
E	9.70		10.4	0.382		0.409
F	6.40		7.00	0.252		0.276
G		2.54			0.1	
H	28.0		30.0	1.102		1.181
L1		3.55			0.140	
L2	1.14		1.70	0.045		0.067
L3		3.30			0.130	
V1		45°			45°	

ORDERING INFORMATION

Part Number	Component Package	QTY/Tube	QTY/Box	QTY/Carton
MBRF20300CT	TO-220F	50PCS	1000PCS	5000PCS

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By QR Code

Website



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