

20A,60V Schottky Barrier Rectifier

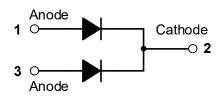
Features

- Low forward voltage, low power loss
- Low leakage current
- High surge current
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21



Applications

- SMPS
- Adapter
- Server Power



Mechanical Data

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube

Maximum Ratings & Electrical Characteristics(TA=25°C unless otherwise noted)					
Parameter	Symbol	MBRF2060CT	Unit		
Maximum repetitive peak reverse voltage	VRRM	60	V		
Maximum RMS voltage	VRMS	42	V		
Maximum DC blocking voltage	VDC	60	V		
Maximum average forward	I F(AV)	20	Α		
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load per diode	IFSM	150	А		
Operating junction temperature range	TJ	-55 to +150	°C		
Storage temperature range	Тѕтс	-55 to +150	°C		



Electrical Specifications (TA=25°C unless otherwise noted)						
Parameter	Symbol	Test Conditions	Тур	Max	Unit	
		IF=10A, TJ =25℃	0.61	0.68		
Forward drap voltage (Note1)	\/-	IF=10A, TJ =125℃	-	0.63	v	
Forward drop voltage (Note1)	VF	IF=20A, TJ =25℃	-	-	V	
		IF=20A, TJ =125℃	-	-		
Poverse leakage current @VP (Note2)	ln.	TJ =25℃	-	100	uA	
Reverse leakage current @VR (Note2)	lR	TJ =100℃	-	10	mA	

Thermal-Mechanical Specifications (TA=25°C unless otherwise noted)				
Parameter	Symbol	Тур	Unit	
Thermal Resistance, Junction to Case	Rejc	4.0	°C /W	
Thermal Resistance, Junction to Ambient	RθJA	62.5	°C /W	

Note:

- 1. Pulse test with PW=0.3ms, duty cycle=2%
- 2. Pulse test with PW=30ms



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

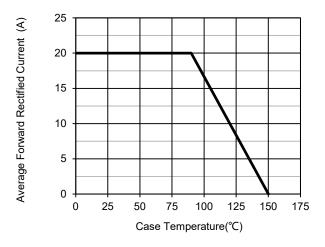


Fig.1 - Forward Current Derating Curve

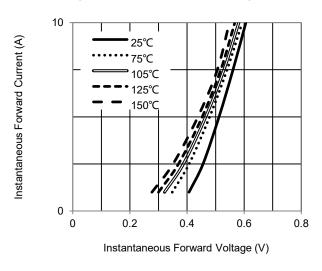


Fig.3 - Typical Forward Voltage Characteristics

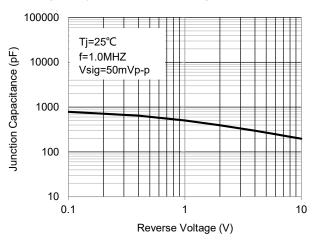


Fig.5 - Typical Junction Capacitance

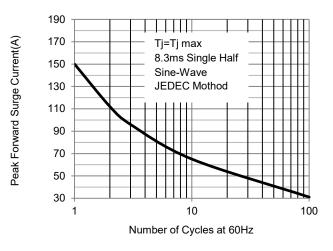


Fig.2 - Maximum Non-Repetitive Surge Current

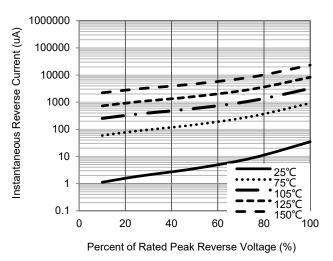
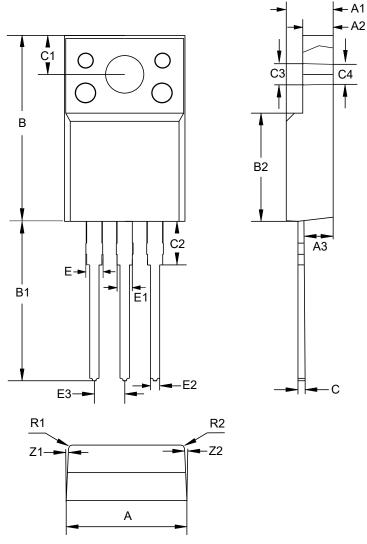


Fig.4 - Typical Reverse Current Characteristics



Package Outline Dimensions (Unit: millimeters)

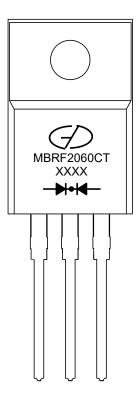
ITO-220AB



	ITO-220AB						
	Min.	Nom.	Max.		Min.	Nom.	Max.
Α	9.9	10.1	10.3	C3	3.0	3.2	3.4
A1	4.6	4.7	4.8	C4	3.0		
A2	2.44	2.54	2.64	Е	1.15	1.35	1.55
А3	2.25	2.45	2.65	E1	1.17	1.27	1.37
В	15.5	15.8	16.1	E2	0.7	0.8	0.9
B1	13.25	13.55	13.85	E3	2.44	2.54	2.64
B2	9.0	9.2	9.4	R1		0.3	
С	0.5	0.6	0.7	R2		0.3	
C1	3.1	3.3	3.5	Z1		3°	
C2	3.0	3.3	3.6	Z2		3°	



Marking Outline



1. Logo Mark:

2. Part Name: MBRF2060CT

3. Date Code: XXXX

4. Polarity : → → → ←

Revision History

Document Version	Date of release	Description of changes
Rev.A	2015.10.15	Released Datasheet
Rev.B	2021.01.19	Modify document format
Rev.C	2022.04.29	Modify ratings and characteristics curves





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