MBR10H100CT

Rev.G Jul.-2018

蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

描述 / Descriptions

Schottky Barrier Diode in a TO-220 Plastic Package.

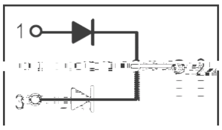
特征 / Features

Low power loss, high efficiency.

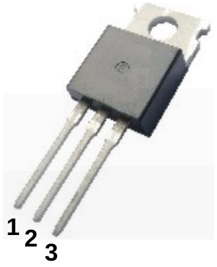
用途 / Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

放大及印章代码 / h_{FE} Classifications & Marking

See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM} V_{RWM} V_{RM}	100	V
Average Rectified Forward Voltage	$V_{R(RMS)}$	70	V
Peak Repetitive Forward Current	$I_{F(AV)}$	2 5	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	175	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.5	/W
Junction Temperature Range	T_{jMAX}	175	
Storage Temperature Range	T_{stg}	-65 175	

电性能参数 / Electrical Characteristics(Ta=25℃)

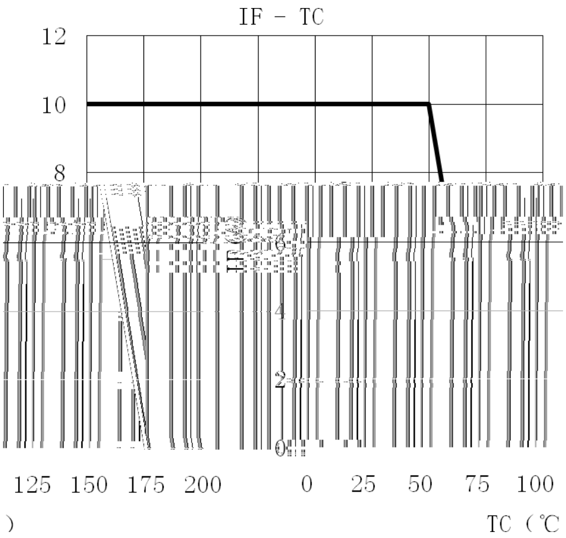
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Current Voltage	V_R	I_R=0.3mA	100			V
Forward Voltage	V_F	I_F=5A(T_J=25)			0.75	V
		I_F=5A(T_J=125)			0.65	V
		I_F=10A(T_J=25)			0.85	V
		I_F=10A(T_J=125)			0.75	V
Instantaneous Reverse Current	I_R Note 1	V_R=100V(T_J=25)			10	A
		V_R=70V(T_J=125)			1.0	mA
		V_R=100V(T_J=125)			5.0	mA

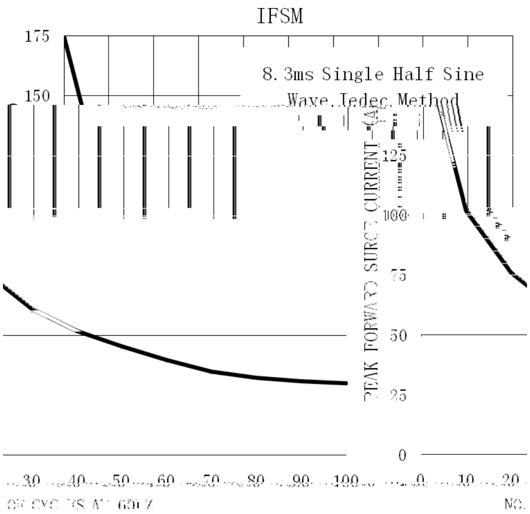
/Notes

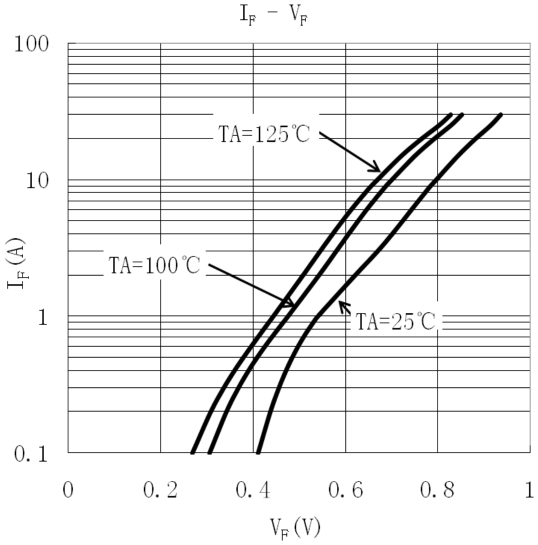
/Short duration pulse test used to minimize self-heating effect.

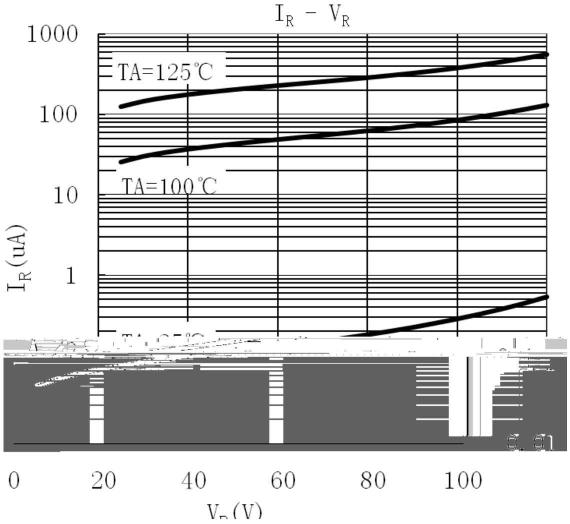
/ Unless otherwise noted, values for the parameters of a single chip.

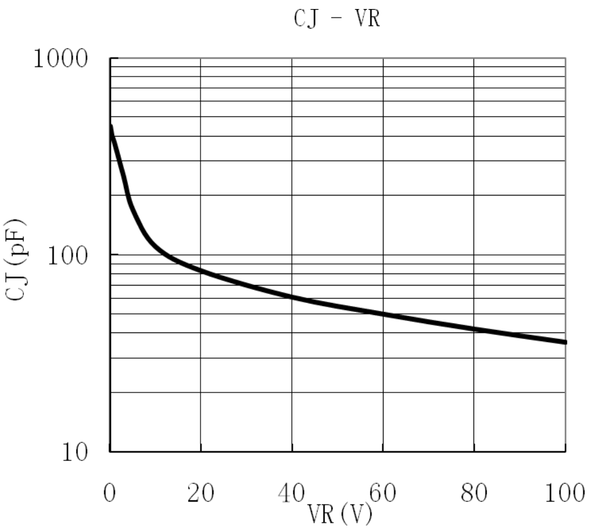
电参数曲线图 / Electrical Characteristic Curve





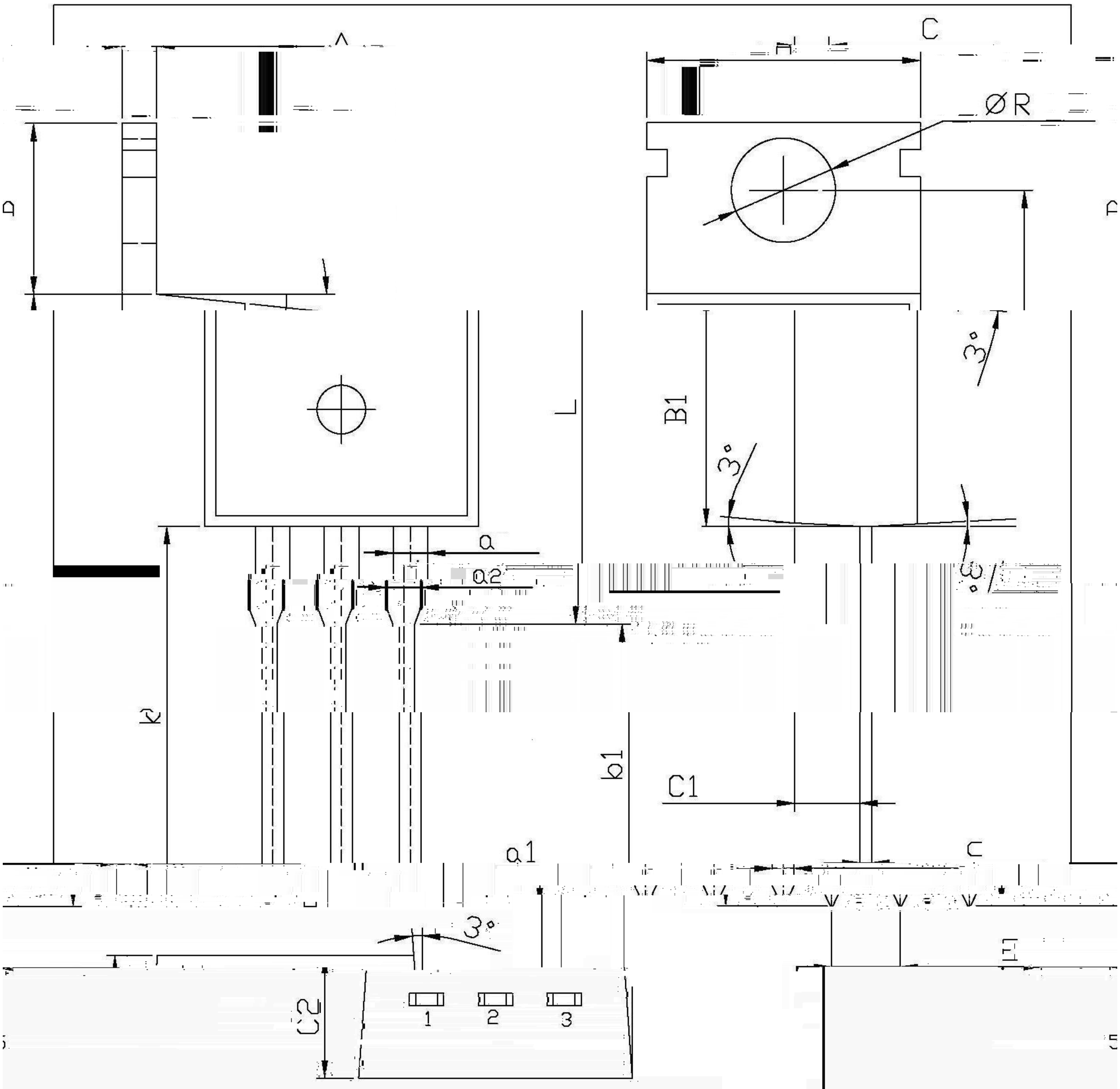






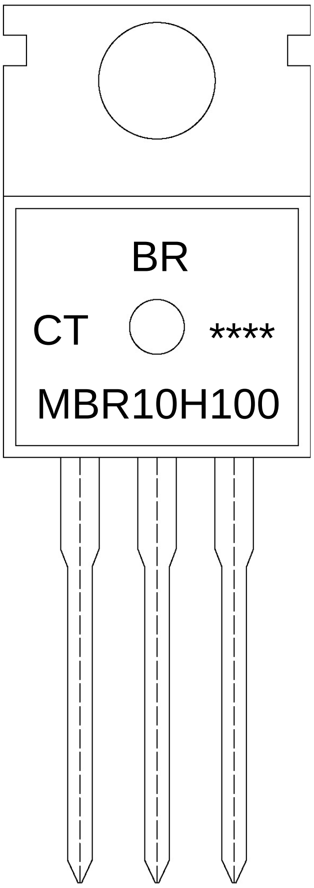
外形尺寸图 / Package Dimensions

TO-220　　单位：mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
[illegible]	9.8	10.3	[illegible]	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
a	1.22	1.32	c	0.4	0.6
F	2.34	2.74	C2	4.3	4.7
a2	1.25	1.45			

印章说明 / Marking Instructions

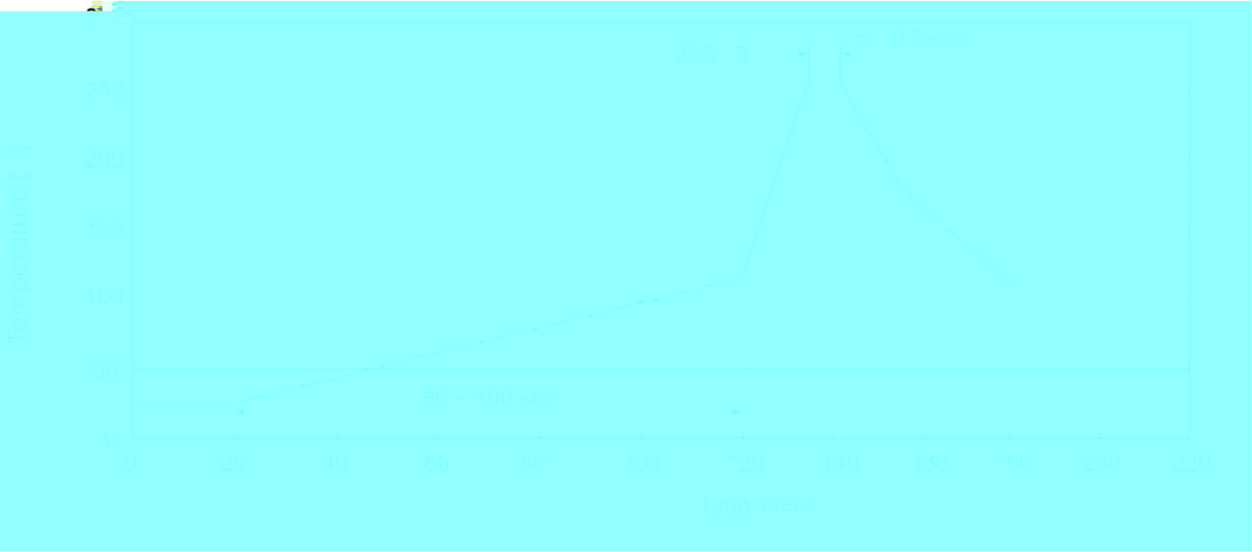


BR

Note:

BR:	Company Code
	Product Type.
:	Internal Structure
****:	Lot No. Code, code change with Lot No.

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



1 25 150 60 90sec;
2 255 5 5 0.5sec;
3 2 10 /sec.

Note:
1.Preheating:25~150 , Time:60~90sec.
2.Peak Temp.:255 5 , Duration:5 0.5sec.
3. Cooling Speed: 2~10 /sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

270 5 10 1 sec.

Temp.:270±5 Time:10±1 sec

包装规格 / Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

使用说明 / Notices