

MBR3045CT

Rev. G Oct.-2018

/ Descriptions

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

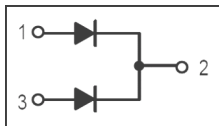
/ Features

Low power loss, high efficiency.

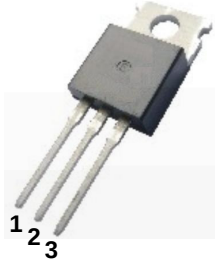
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

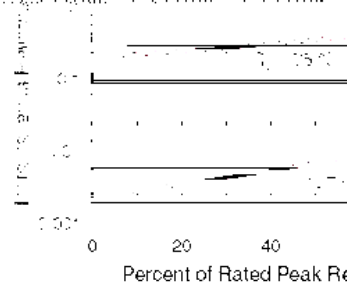
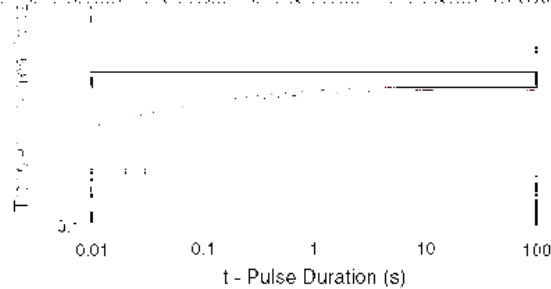
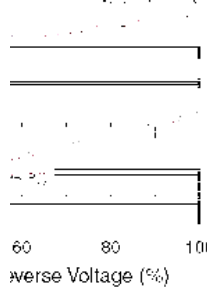
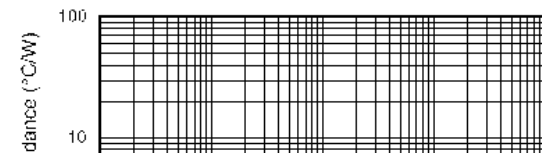
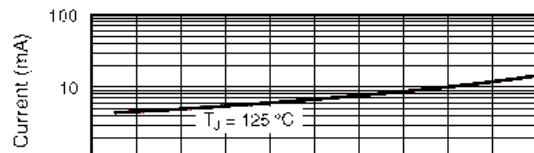
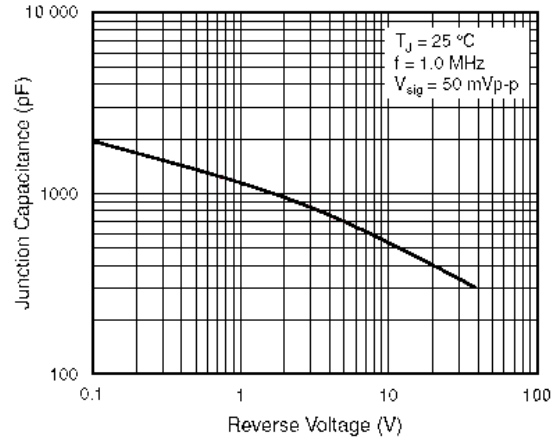
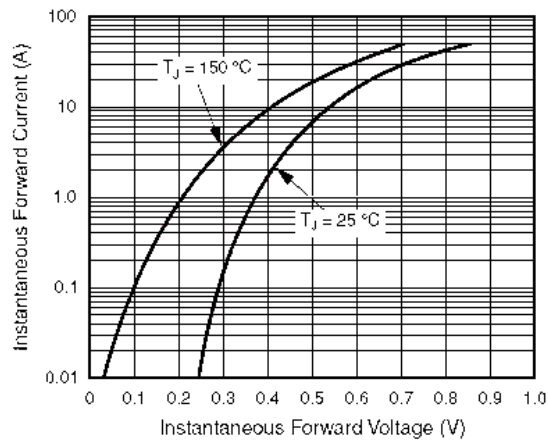
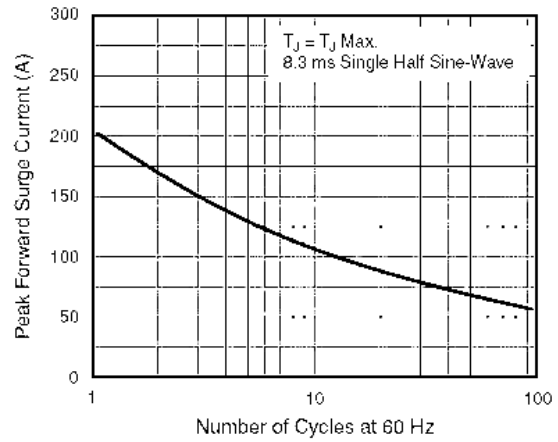
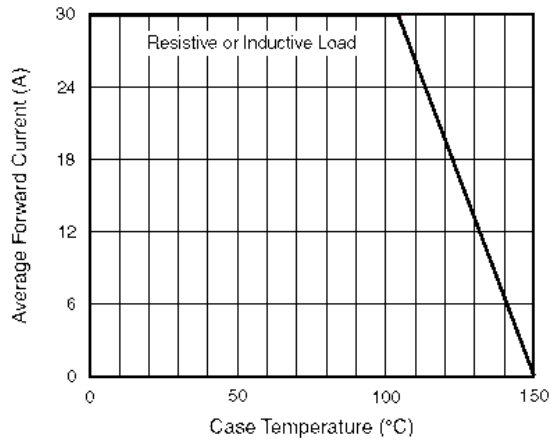
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Peak Repetitive Forward Current	$I_{F(AV)}$	15	A
	$I_{F(AV)}$ total device	30	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	200	A
Repetitive Peak Reverse Surge Current	I_{RRM}	2.0	A
Thermal Resistance Junction to Case	R_{JC}	1.5	/W
Junction Temperature Range	T_J	150	
Storage Temperature Range	T_{stg}	-65 150	

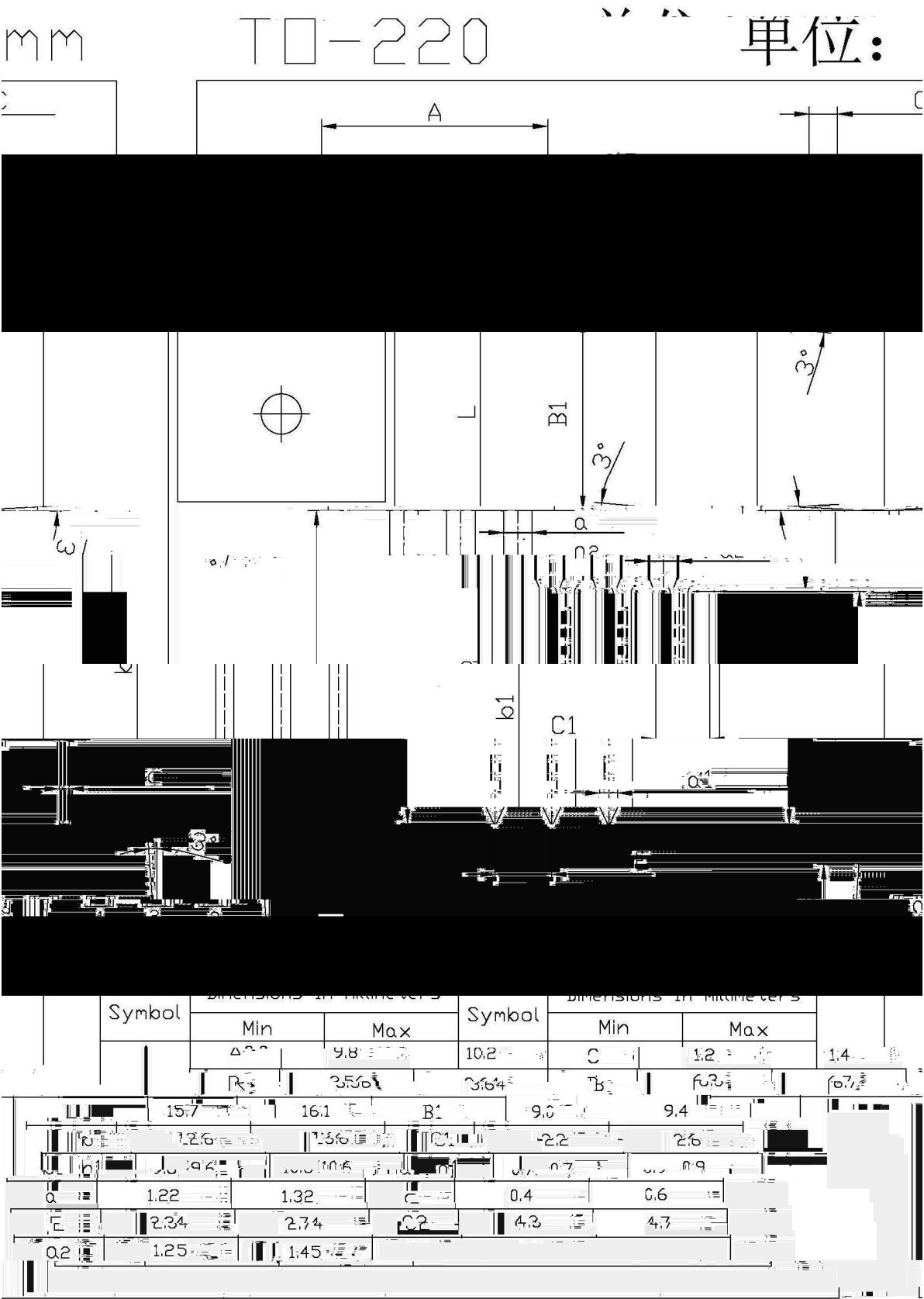
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=30A(T_C=25)$			0.76	V
		$I_F=20A(T_C=125)$			0.60	V
		$I_F=30A(T_C=125)$			0.72	V
Instantaneous Reverse Current	I_R	$T_J=25$			1.0	mA
		$T_J=125$			60	mA
Voltage Rate of Change	dv/dt				10000	V/ s

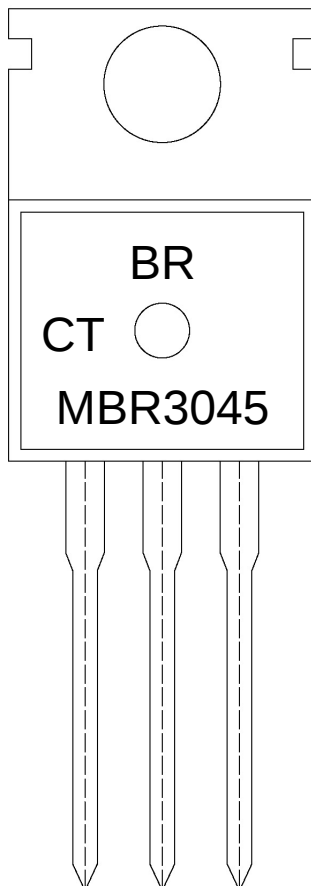
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MBR3045

CT:

Note:

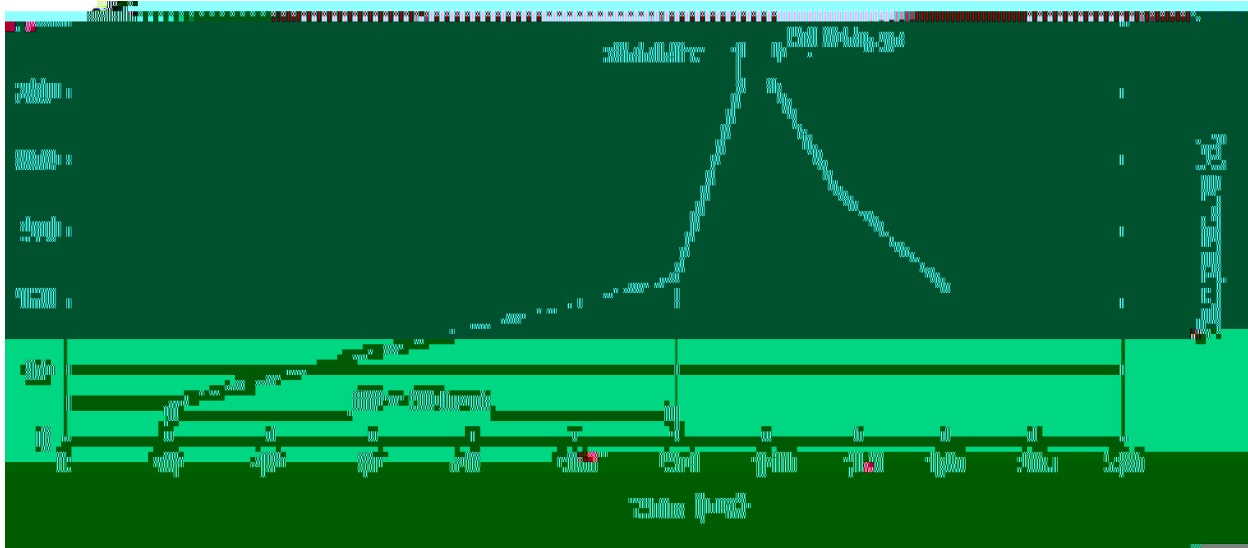
BR: Company Code

MBR3045 Product Type.

CT: Internal Structure

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

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

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只套管	套管盒	只盒	盒箱	只箱	套管	盒	箱

/ Notices