

MBR1045CT

Rev.H Oct.-2018

WR0553

Schottky Barrier Diode in a TO-220 Plastic Package.

Low power loss, high efficiency.

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



PIN1 Anode PIN 2 Cathode PIN 3 Anode

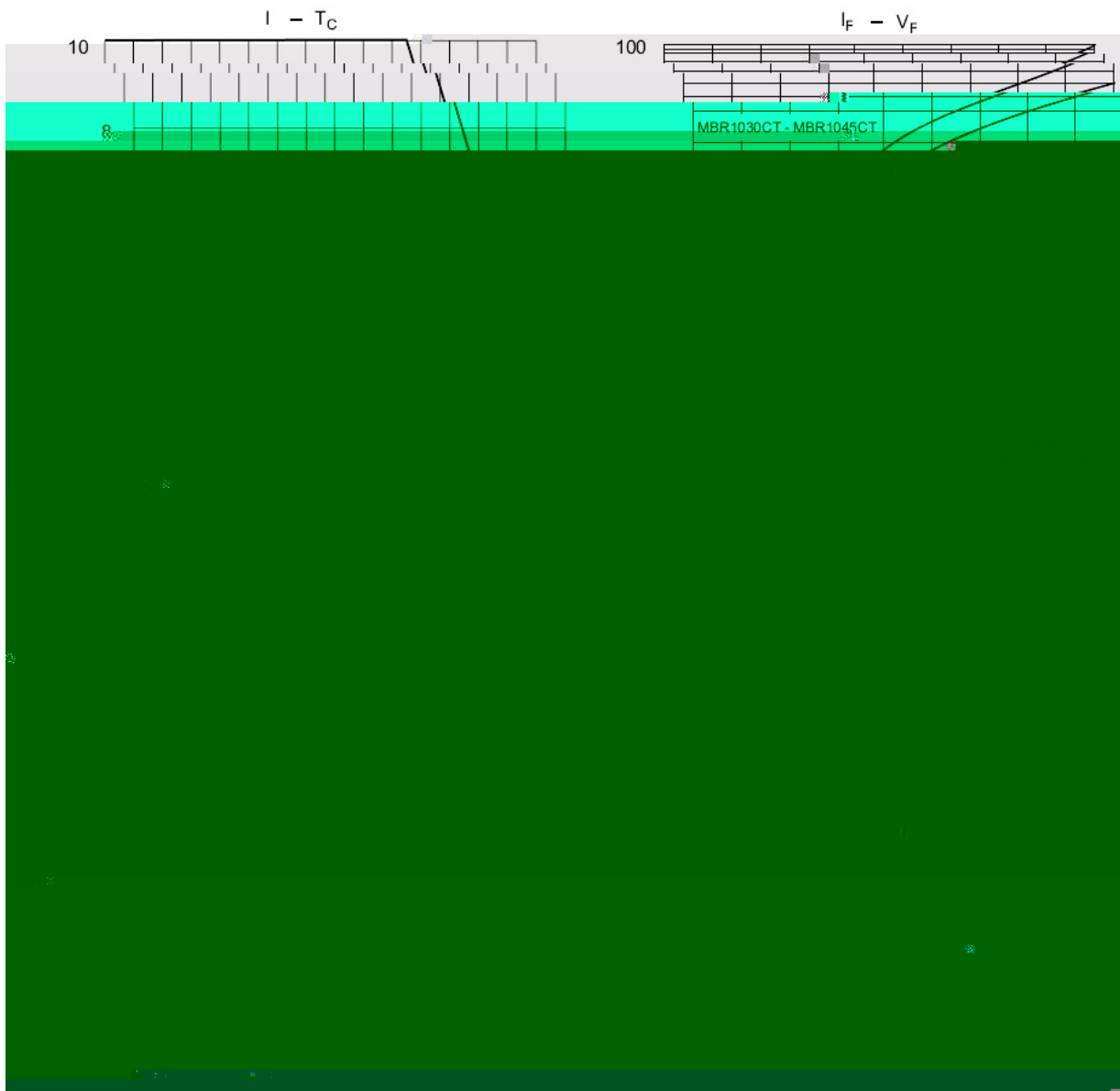
/ h_{FE} Classifications & Marking

/ Absolute Maximum Ratings(Ta=25

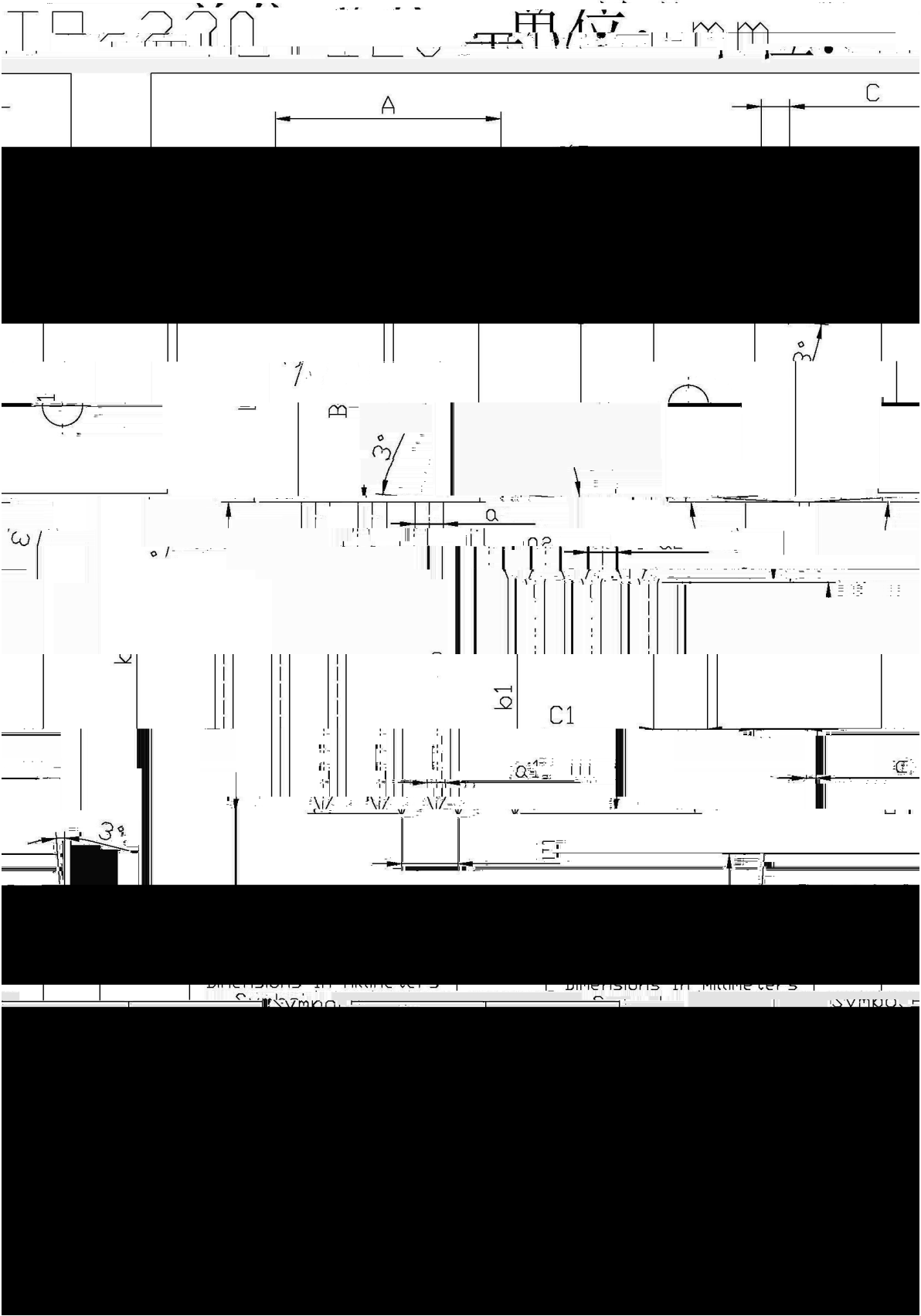
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Instantaneous Reverse Voltage	V_R	31.5	V
Average Rectified Output Current	I_O	10	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Repetitive Peak Reverse Current	I_{RRM}	1.0	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	30	K/W
Storage Temperature Range	T_{STG}	-65 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=5A(T_J=125^\circ C)$			0.57	V
		$I_F=5A(T_J=25^\circ C)$			0.70	V
		$I_F=10A(T_J=25^\circ C)$			0.84	V
Instantaneous Reverse Current	I_{RM}	$T_C=25$			0.1	mA
		$T_C=125$			15	mA
Junction Capacitance	C_j				150	pF
Voltage Rate of Change	dv/dt				1000	V/ μs

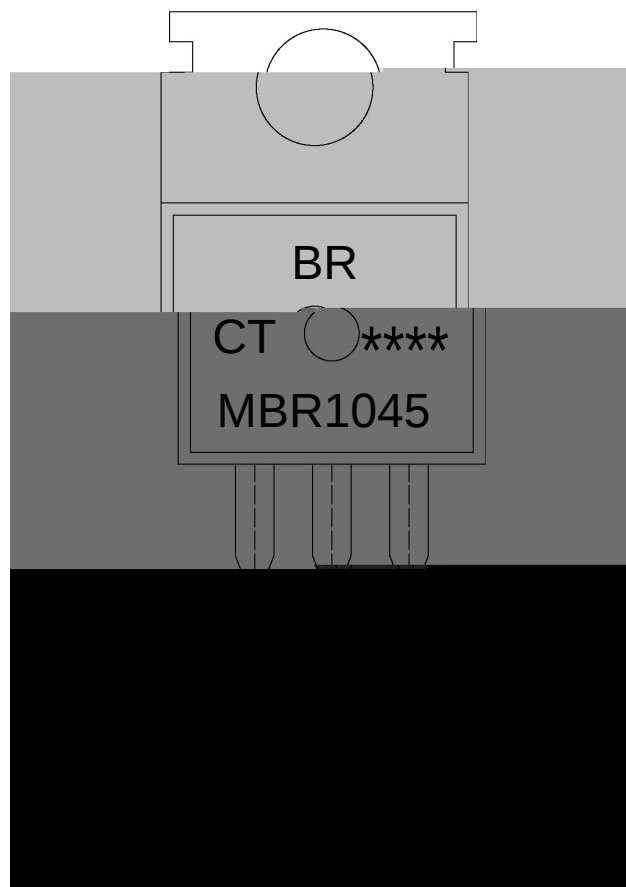
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



EU

P EU4378

FW:

Note:

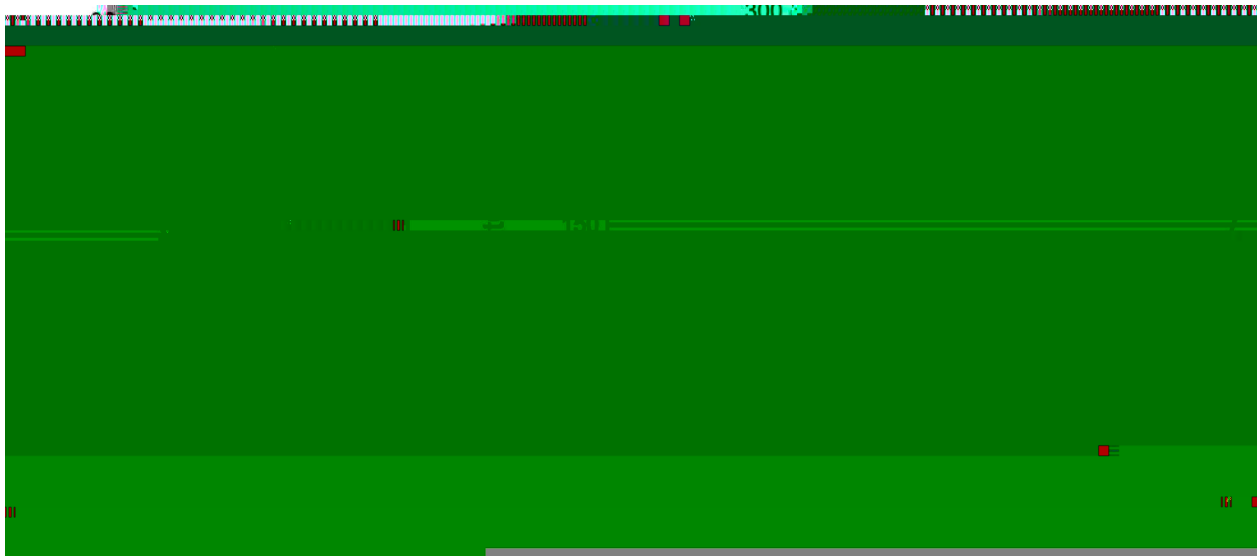
BR: Company Code

MBR1045 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)		
	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