

MBR1045CT

Rev.H Oct.-2018

WR0553 M M $\leq 9^\circ$ II 1

Schottky Barrier Diode in a TO-220 Plastic Package.

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Low power loss, high efficiency.

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



PIN1 χ Anode PIN 2 χ Cathode PIN 3 χ Anode

/ h_{FE} Classifications & Marking

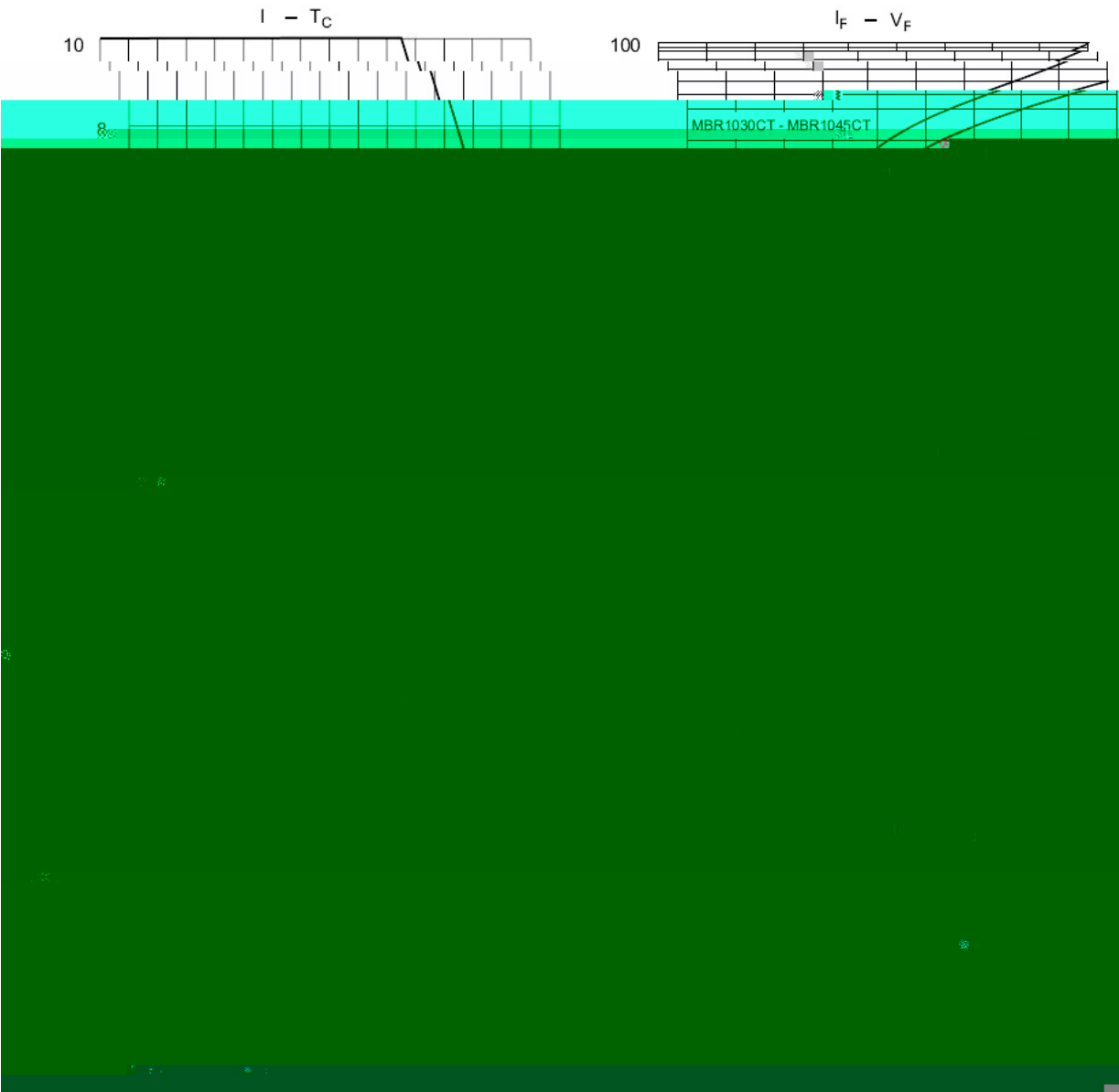
м 1 " See Marking Instruction 5.D.150.510.ef.66 23TT7 1 40(.150://38ef.66 232.16 4

/ Absolute Maximum Ratings(Ta=25

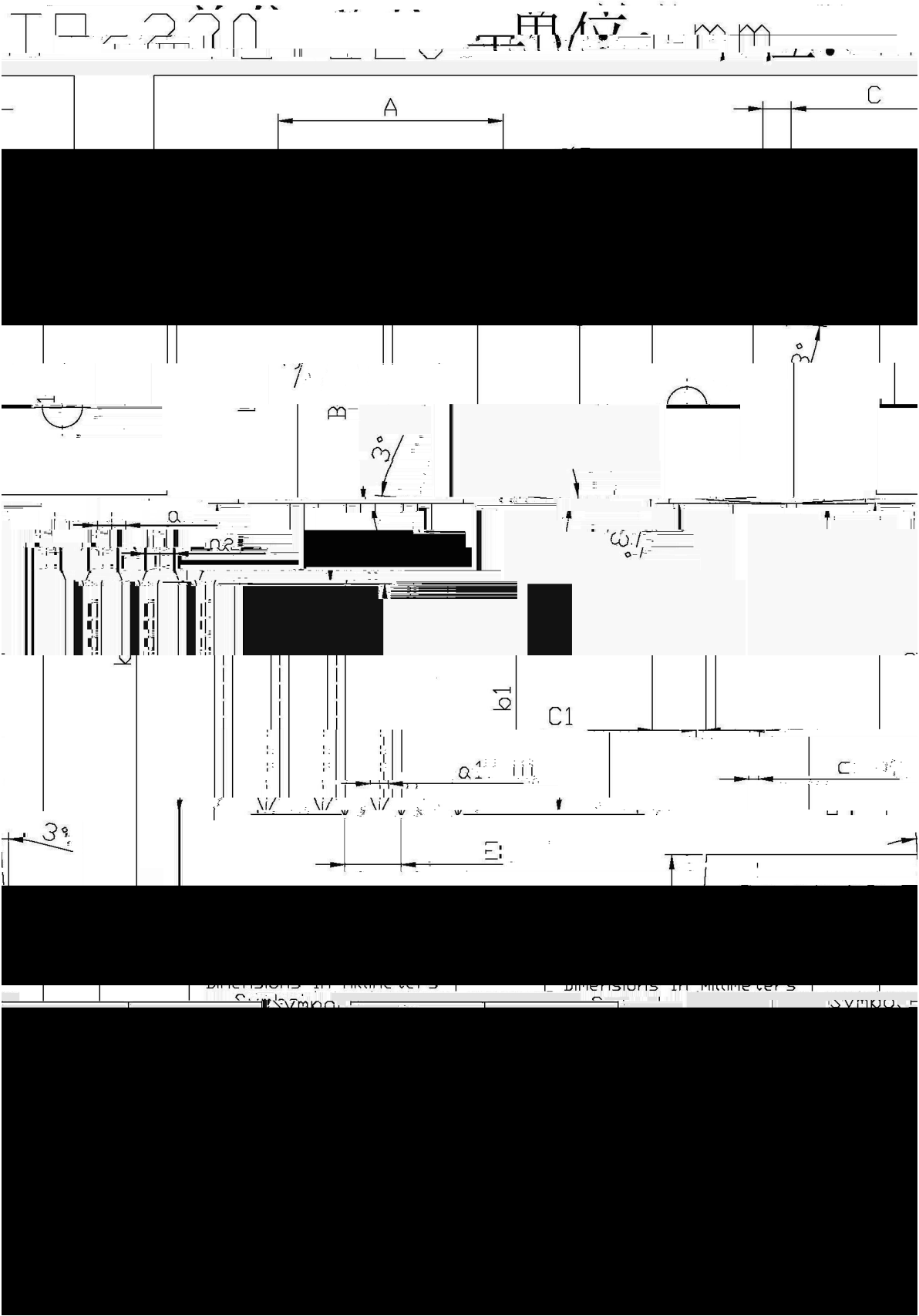
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Instantaneous Reverse Voltage	V_R	31.5	V
Average Rectified Output Current	I_O	10	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Repetitive Peak Reverse Current	I_{RRM}	1.0	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	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



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



- ” X
- 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.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

” Q T Y / 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