

/ Descriptions

TO-220

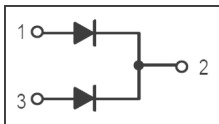
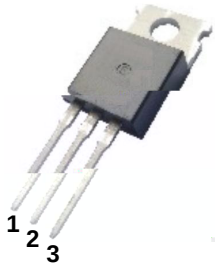
Schottky Barrier Diode in a TO-220 Plastic Package.

/ 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}	60	V
Average Forward Current	$I_{F(AV)}$	20	A
Non Repetitive Peak Surge Current	I_{FSM}	150	A
Power Dissipation	P_D	2.0	W
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	2.0	/W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	60	/W
Junction Temperature Range	T_J	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10A(T_C=25)$			0.80	V
		$I_F=10A(T_C=125)$			0.70	V
		$I_F=20A(T_C=25)$			0.95	V
		$I_F=20A(T_C=125)$			0.85	V
Instantaneous Reverse Current	I_R	$T_A=25$			100	μA
		$T_A=125$			30	mA
Repetitive Peak Reverse Current	I_{RRM}	$f=1.0KHZ$			0.5	A

/ Electrical Characteristic Curve

Figure 1. Forward Current Derating Curve

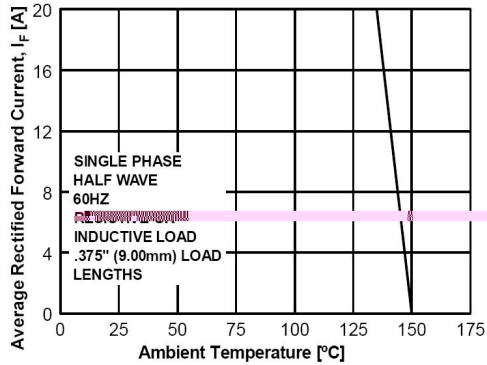


Figure 2. Non-Repetitive Surge Current

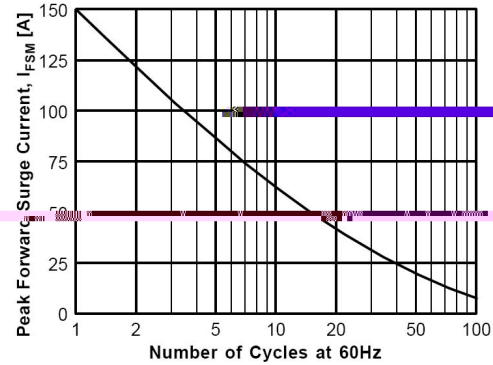


Figure 3. Forward Voltage Characteristics

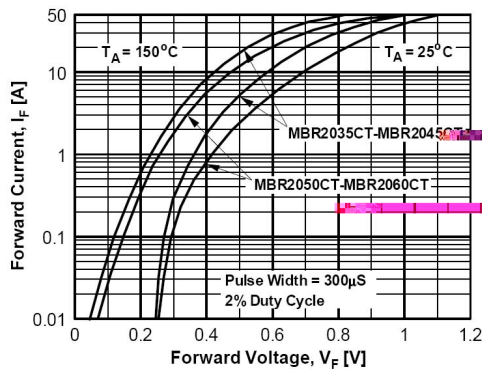


Figure 4. Reverse Current vs Reverse Voltage

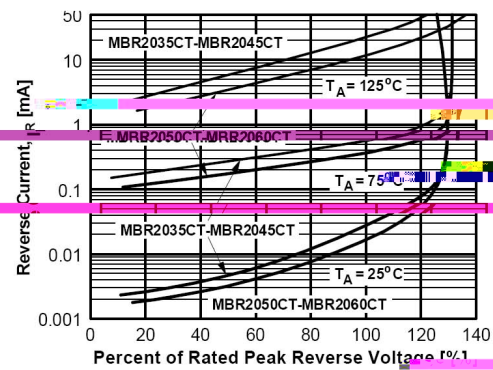


Figure 5. Total Capacitance

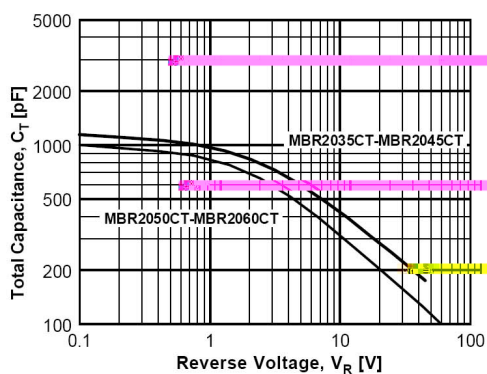
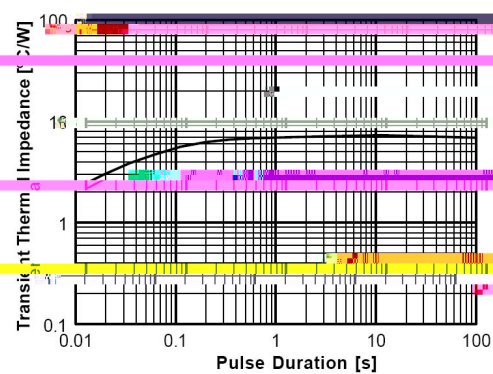
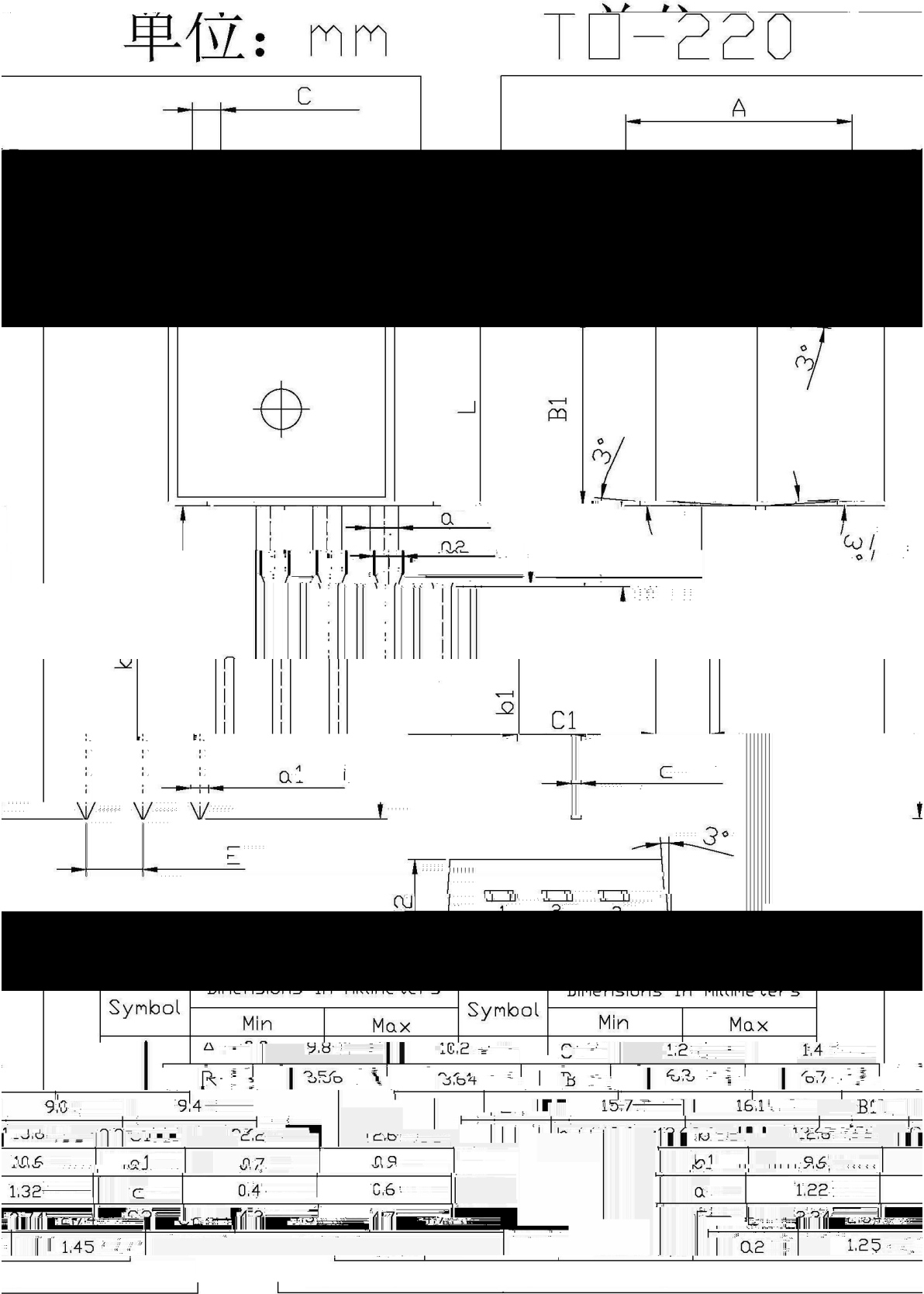


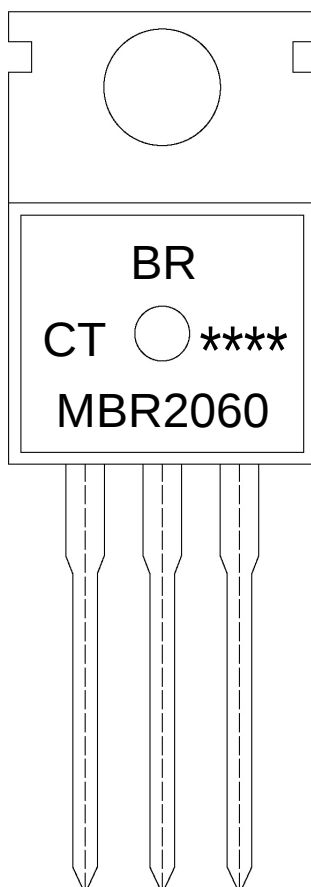
Figure 6. Thermal Impedance Characteristics



/ Package Dimensions



/ Marking Instructions



BR

MBR2060

CT:

Note:

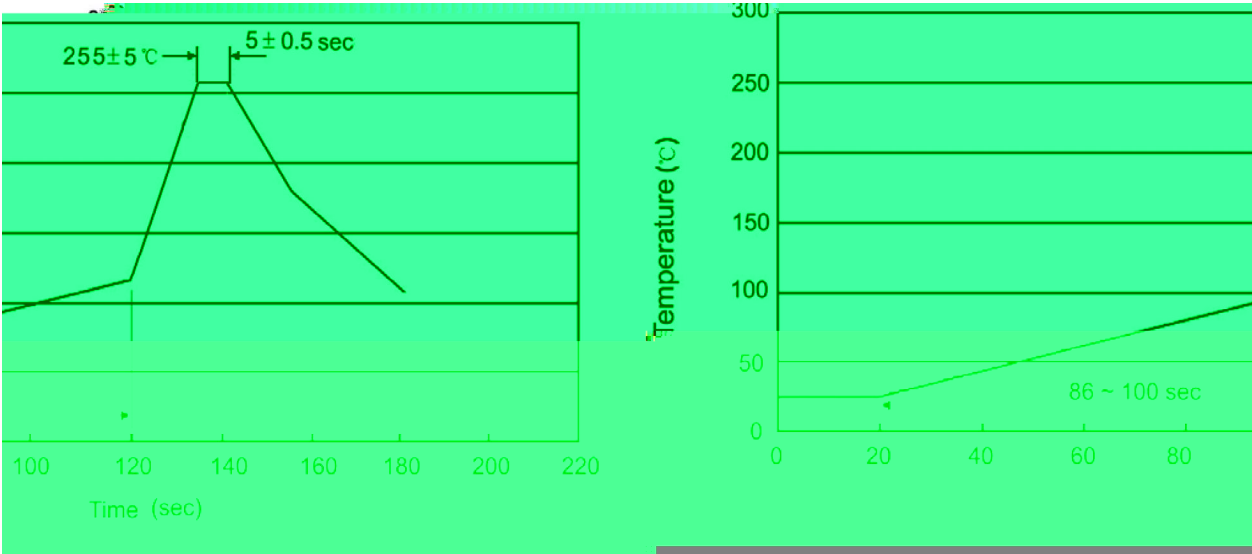
BR: Company Code

MBR2060 Product Type.

CT: Internal Structure

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

() / 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.

/ 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
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195