/ Descriptions

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

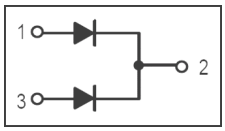
/ Features

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)

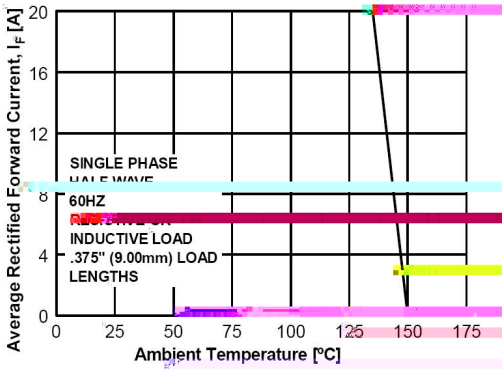
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Average Forward Current	$I_{F(AV)}$	20	A
Non Repetitive Peak Surge Current	I_{FSM}	150	A
Power Dissipation	P_D	2.0	W
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	2.0	/W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	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	uA
		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

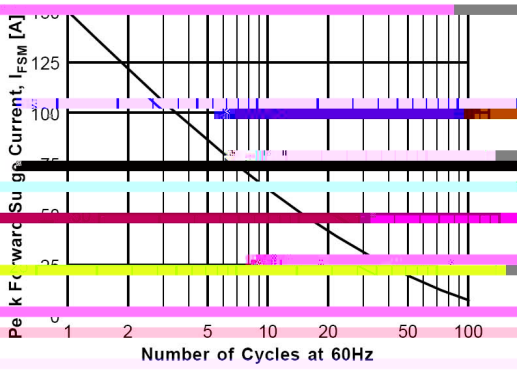


Figure 3. Forward Voltage Characteristics

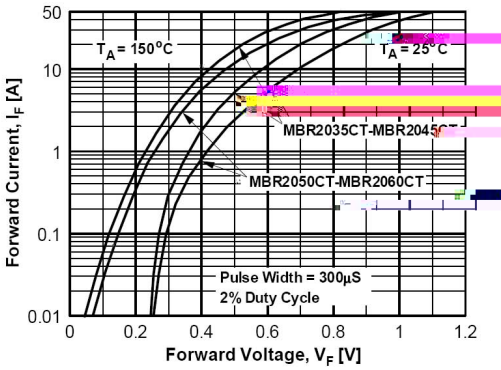


Figure 4. Reverse Current vs Reverse Voltage

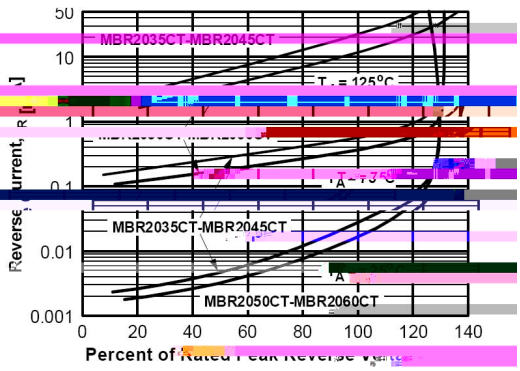


Figure 5. Total Capacitance

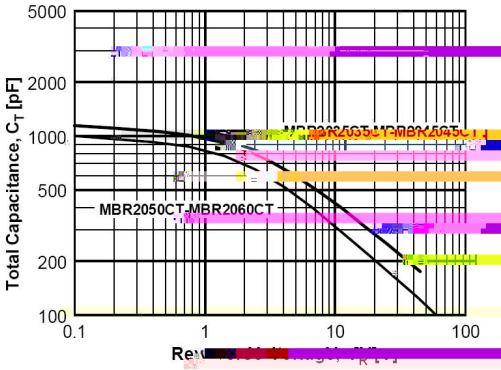
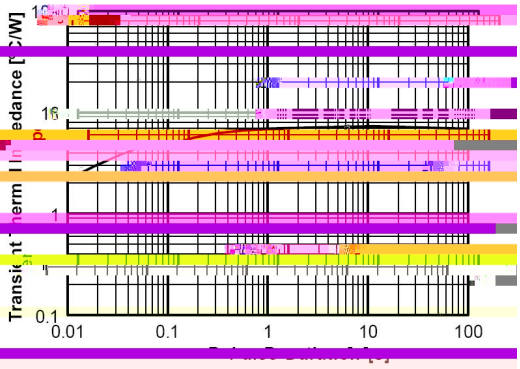
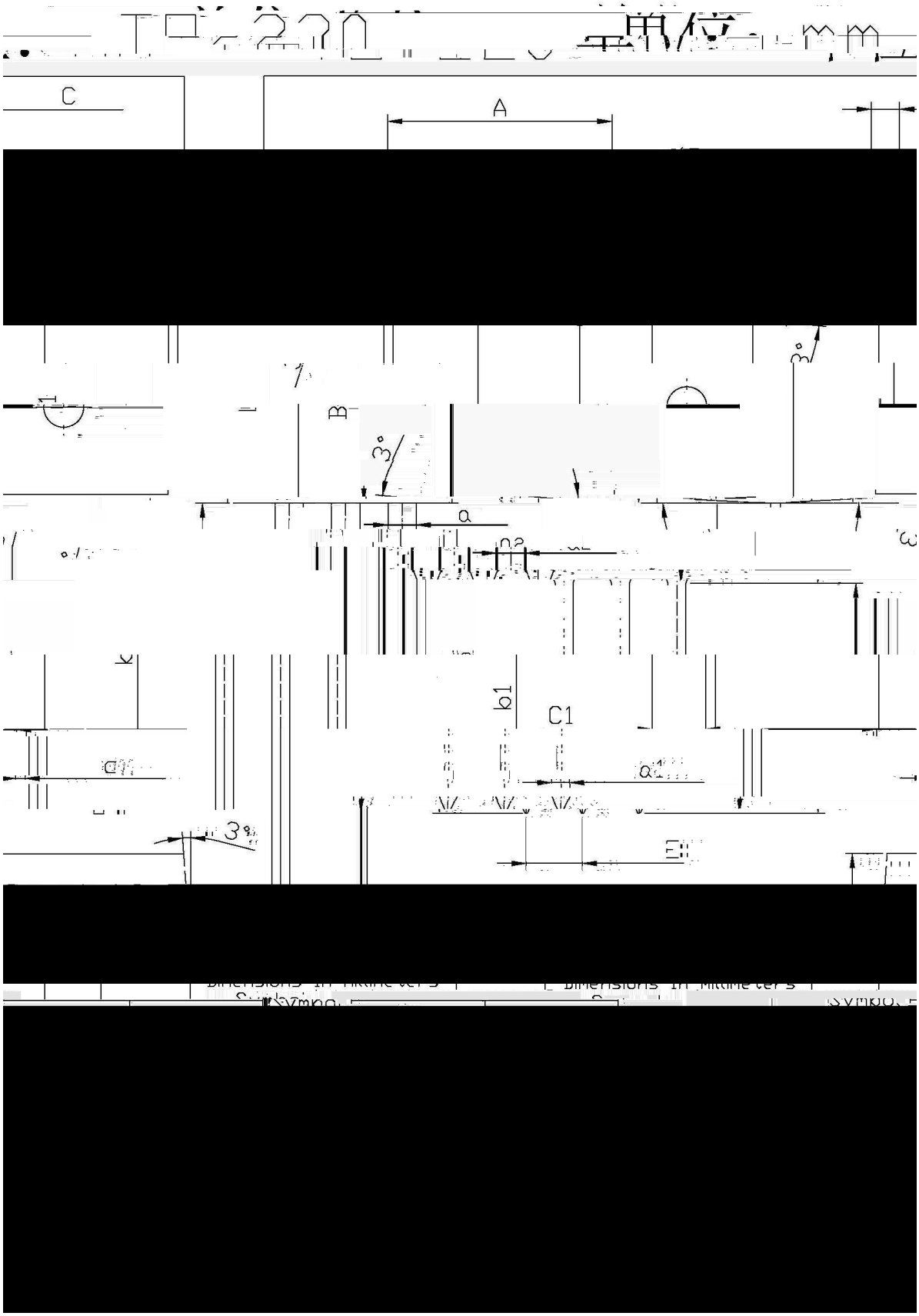


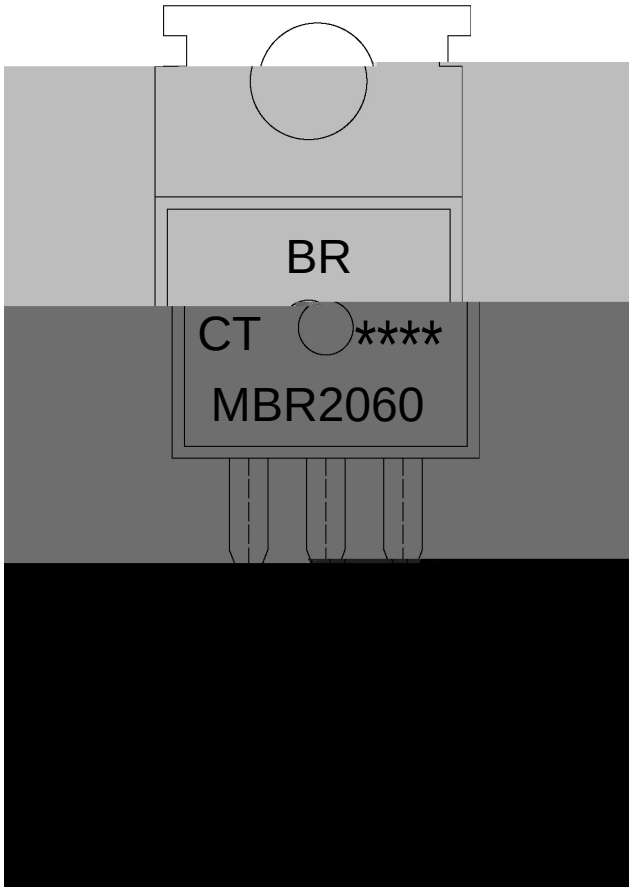
Figure 6. Thermal Impedance Characteristics



/ Package Dimensions



/ Marking Instructions



BR

MBR2060

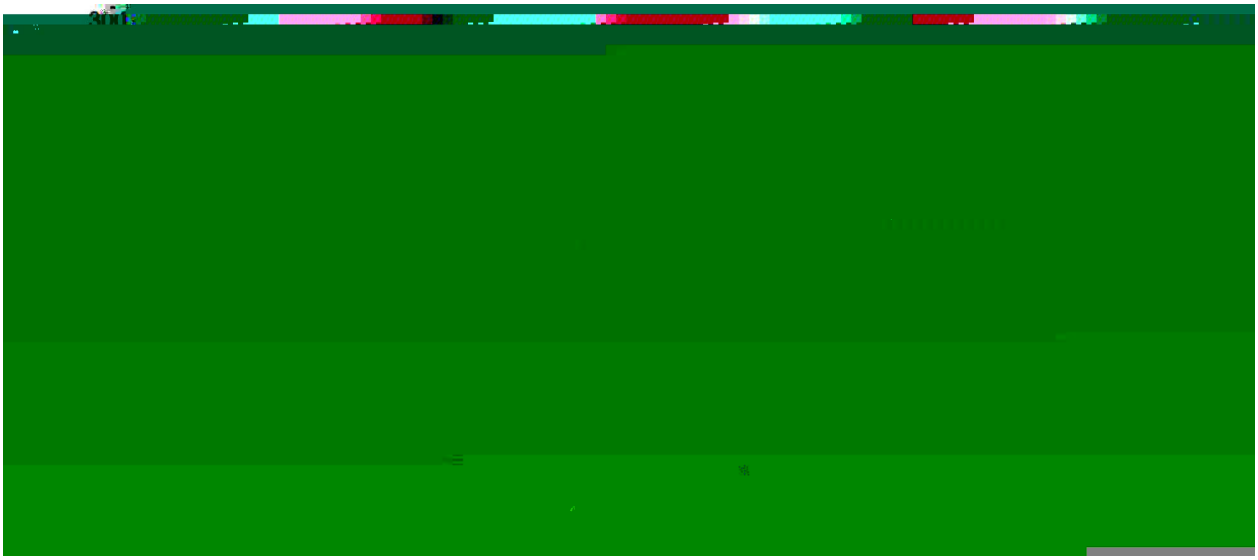
CT:

****

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)



					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	Units					Dimension		(unit mm^3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195