

/ Descriptions

Schottky Diode in a TO-252 Plastic Package.

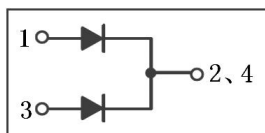
/ Features

Low power loss, high efficiency, HF Product.

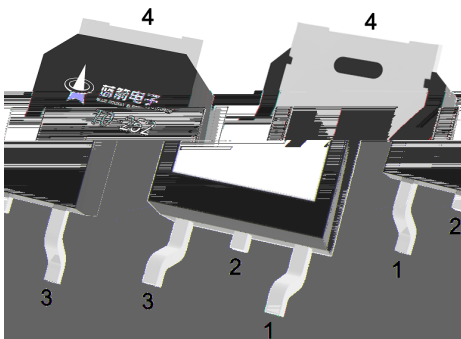
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2,4 Cathode

PIN 3 Anode

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Rectified Forward Current	$I_{F(AV)}$	2×5	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal resistance, junction to case	$R_{\theta Jc}$	6.5	/W
Junction Temperature Range	$T_{J\ MAX}$	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

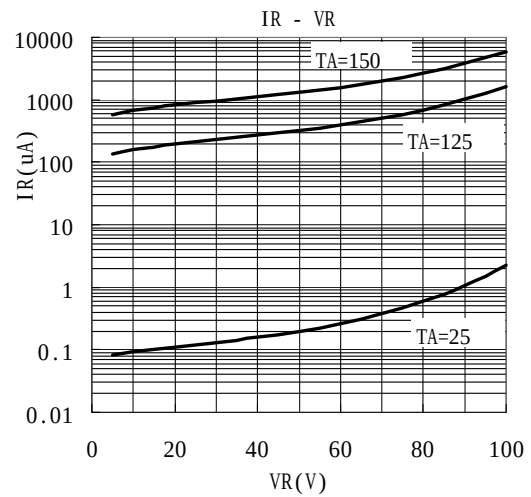
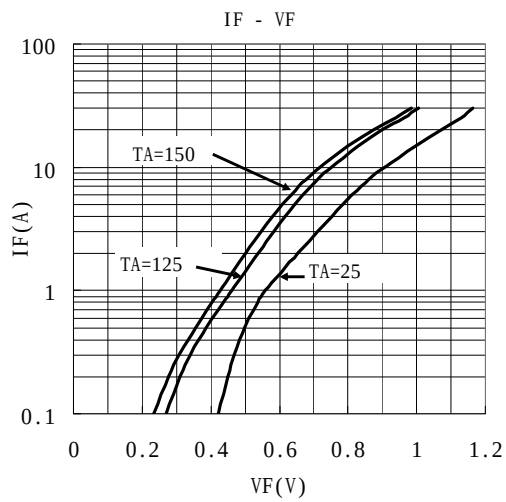
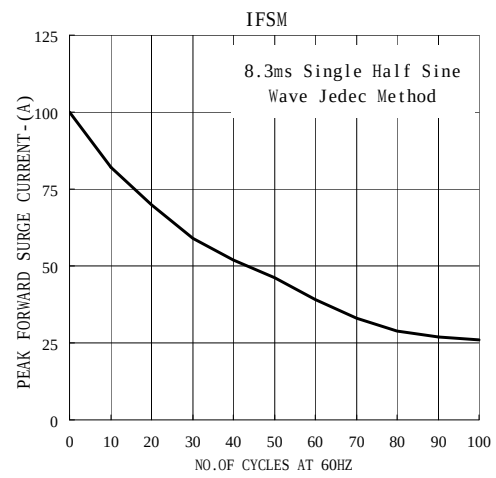
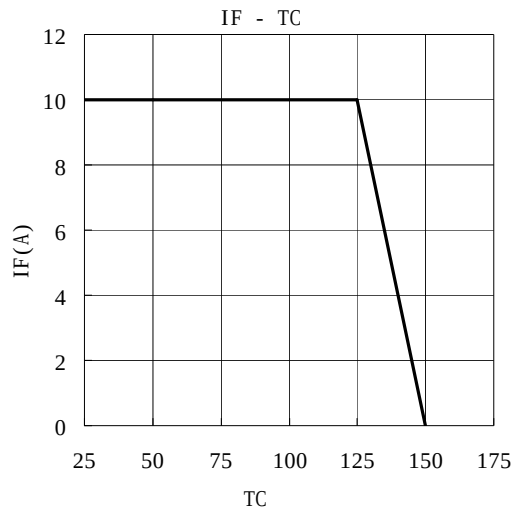
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=0.3mA$	100			V
Forward Voltage	V_F	$I_F=5A$ $T_J=25$			0.85	V
		$I_F=5A$ $T_J=125$			0.75	V
		$I_F=10A$ $T_J=25$			0.95	V
		$I_F=10A$ $T_J=125$			0.85	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100V$ $T_J=25$			10	μA
		$V_R=70V$ $T_J=125$			1.0	mA
		$V_R=100V$ $T_J=125$			5.0	mA

/Notes

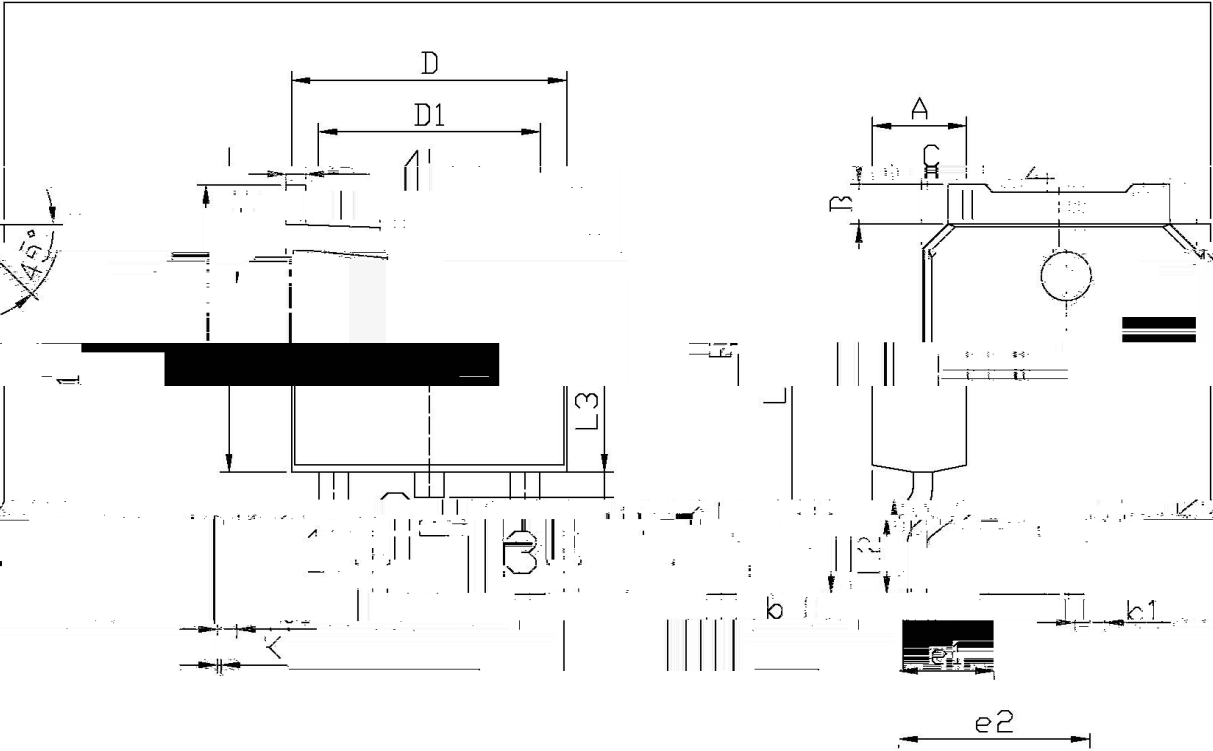
/Short duration pulse test used to minimize self-heating effect.

/ Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve



/ Package Dimensions



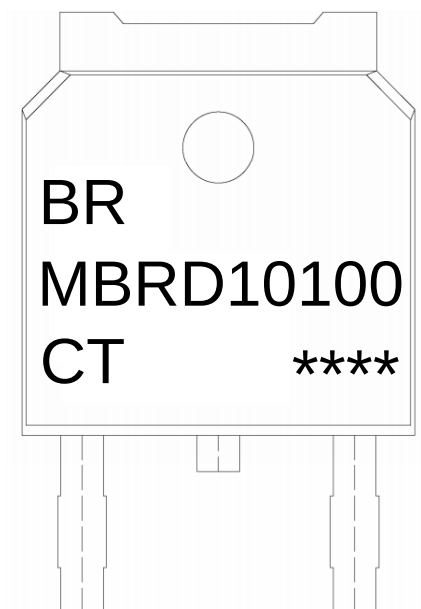
单位: mm

Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
		Min	Max			Min	Max
6.25	A	6.25	6.40	2.40	B	2.40	5.05
0.95	C	0.25	2.24	2.34	B		
0.70	e1	0.60	0.72	0.67	b1	0.45	
0.55	L1	9.85	10.35				
0.45	L3	0.45	0.55	1.70		3.00	
0.75	L3	0.60	0.90			6.45	
5.50	K	0.00	0.10	DL		5.10	

T0-252



/ Marking Instructions



Note:

BR:

Company Code

MBRD10100

Product Type Code

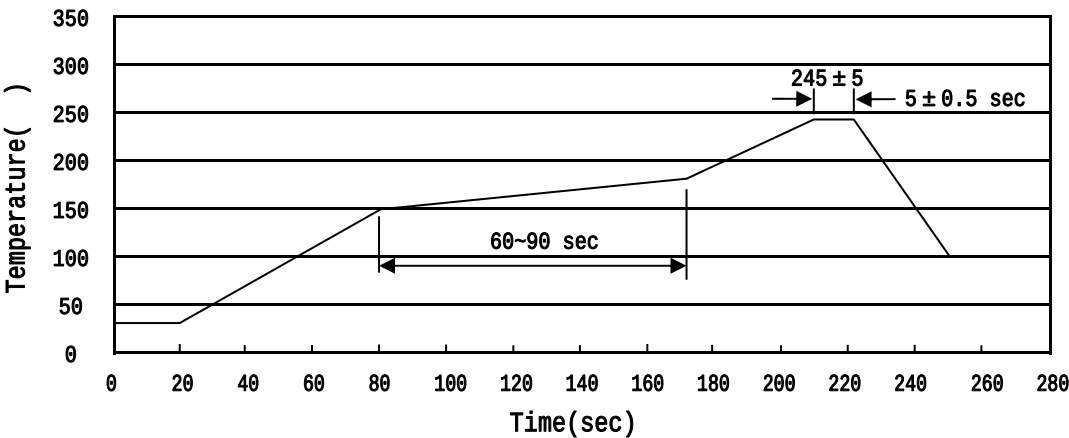
CT:

Internal Structure

****:

Lot No. Code, code change with Lot No.

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 5 , Duration:5 0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices