

/ Descriptions

TO-252

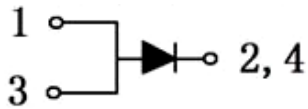
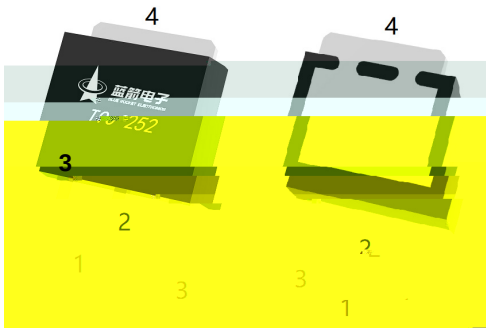
Schottky Barrier Diode in a TO-252 Plastic Package.

/ 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.

MBRD1045

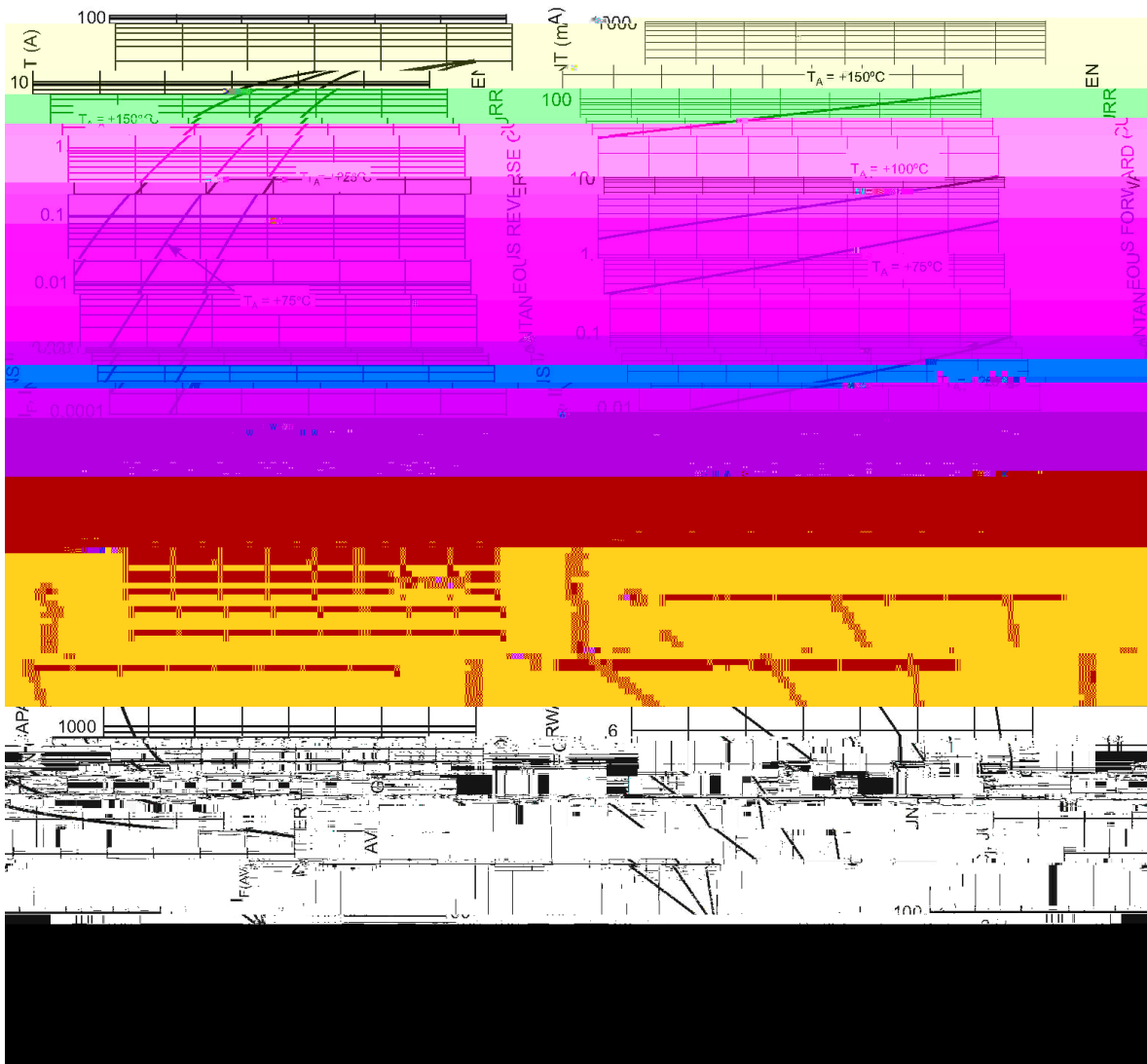
Rev.H Oct.-2024

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	V_{RRM} V_{RWM}	45	V
Reverse Voltage	V_R	45	V
Average Rectified Forward Current	$I_{F(AV)}$	10	A
Non Repetitive Peak Surge Current	I_{FSM}	100	A
Junction Temperature Range	T_j	150	
Storage Temperature Range	T_{stg}	-65 150	

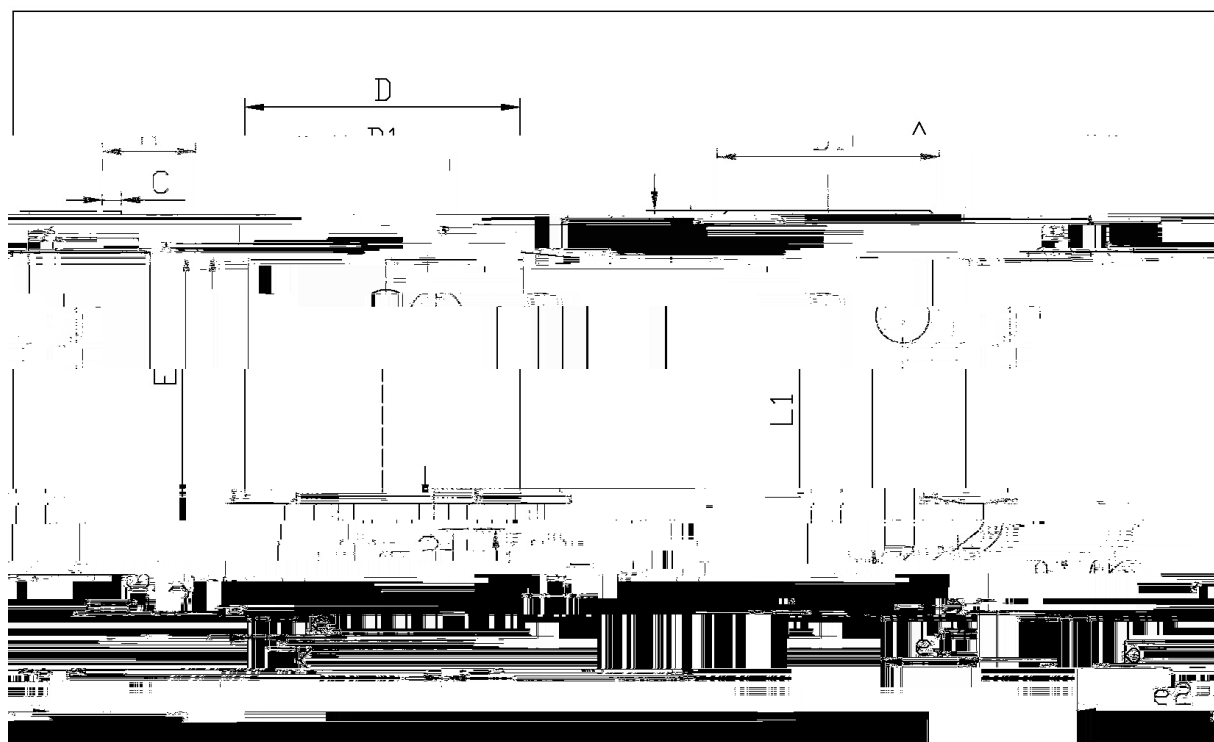
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R = 1mA$	45			V
Peak Forward Voltage	V_{FM}	$I_F = 2.0A(T_C = 25^\circ C)$		0.41	0.45	V
		$I_F = 2.0A(T_C = 125^\circ C)$		0.37	0.41	V
		$I_F = 10A(T_C = 25^\circ C)$		0.55	0.6	V
Instantaneous Reverse Current	I_{RM}	$V_R = 40V(T_C = 25^\circ C)$			0.5	mA
		$V_R = 40V(T_C = 125^\circ C)$			50	mA

V

/ Electrical Characteristic Curve



/ Package Dimensions

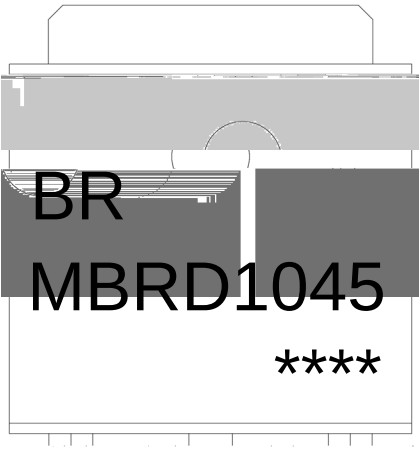


单位: mm

Symbol I		Symbol I	
Max	Min	Max	Min
6.25	3.30	2.40	5.95
0.50	0.90	0.20	0.70
0.55	0.45	0.55	0.45
0.60	0.50	0.60	0.50
0.65	0.55	0.65	0.55
0.70	0.60	0.70	0.60
0.75	0.65	0.75	0.65
0.80	0.70	0.80	0.70
0.85	0.75	0.85	0.75
0.90	0.80	0.90	0.80
0.95	0.85	0.95	0.85
1.00	0.90	1.00	0.90
1.05	0.95	1.05	0.95
1.10	1.00	1.10	1.00
1.15	1.05	1.15	1.05
1.20	1.10	1.20	1.10
1.25	1.15	1.25	1.15
1.30	1.20	1.30	1.20
1.35	1.25	1.35	1.25
1.40	1.30	1.40	1.30
1.45	1.35	1.45	1.35
1.50	1.40	1.50	1.40
1.55	1.45	1.55	1.45
1.60	1.50	1.60	1.50
1.65	1.55	1.65	1.55
1.70	1.60	1.70	1.60
1.75	1.65	1.75	1.65
1.80	1.70	1.80	1.70
1.85	1.75	1.85	1.75
1.90	1.80	1.90	1.80
1.95	1.85	1.95	1.85
2.00	1.90	2.00	1.90
2.05	1.95	2.05	1.95
2.10	2.00	2.10	2.00
2.15	2.05	2.15	2.05
2.20	2.10	2.20	2.10
2.25	2.15	2.25	2.15
2.30	2.20	2.30	2.20
2.35	2.25	2.35	2.25
2.40	2.30	2.40	2.30
2.45	2.35	2.45	2.35
2.50	2.40	2.50	2.40
2.55	2.45	2.55	2.45
2.60	2.50	2.60	2.50
2.65	2.55	2.65	2.55
2.70	2.60	2.70	2.60
2.75	2.65	2.75	2.65
2.80	2.70	2.80	2.70
2.85	2.75	2.85	2.75
2.90	2.80	2.90	2.80
2.95	2.85	2.95	2.85
3.00	2.90	3.00	2.90
3.05	2.95	3.05	2.95
3.10	3.00	3.10	3.00
3.15	3.05	3.15	3.05
3.20	3.10	3.20	3.10
3.25	3.15	3.25	3.15
3.30	3.20	3.30	3.20
3.35	3.25	3.35	3.25
3.40	3.30	3.40	3.30
3.45	3.35	3.45	3.35
3.50	3.40	3.50	3.40
3.55	3.45	3.55	3.45
3.60	3.50	3.60	3.50
3.65	3.55	3.65	3.55
3.70	3.60	3.70	3.60
3.75	3.65	3.75	3.65
3.80	3.70	3.80	3.70
3.85	3.75	3.85	3.75
3.90	3.80	3.90	3.80
3.95	3.85	3.95	3.85
4.00	3.90	4.00	3.90
4.05	3.95	4.05	3.95
4.10	4.00	4.10	4.00
4.15	4.05	4.15	4.05
4.20	4.10	4.20	4.10
4.25	4.15	4.25	4.15
4.30	4.20	4.30	4.20
4.35	4.25	4.35	4.25
4.40	4.30	4.40	4.30
4.45	4.35	4.45	4.35
4.50	4.40	4.50	4.40
4.55	4.45	4.55	4.45
4.60	4.50	4.60	4.50
4.65	4.55	4.65	4.55
4.70	4.60	4.70	4.60

FD-302 (Rev. 11-27-70)

/ Marking Instructions



BR	
MBRD1045	

Note:	
BR:	Company Code
MBRD1045	Product Type Code
****:	Lot No. Code, code change with Lot No

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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)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
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)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box