

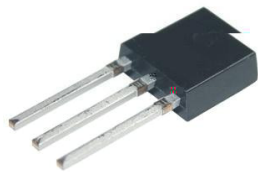
/ D

TO-251

Schottky Barrier Diode in a TO-251 Plastic Package.

Low power loss, high efficiency.

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



PIN1 Anode

PIN 2 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

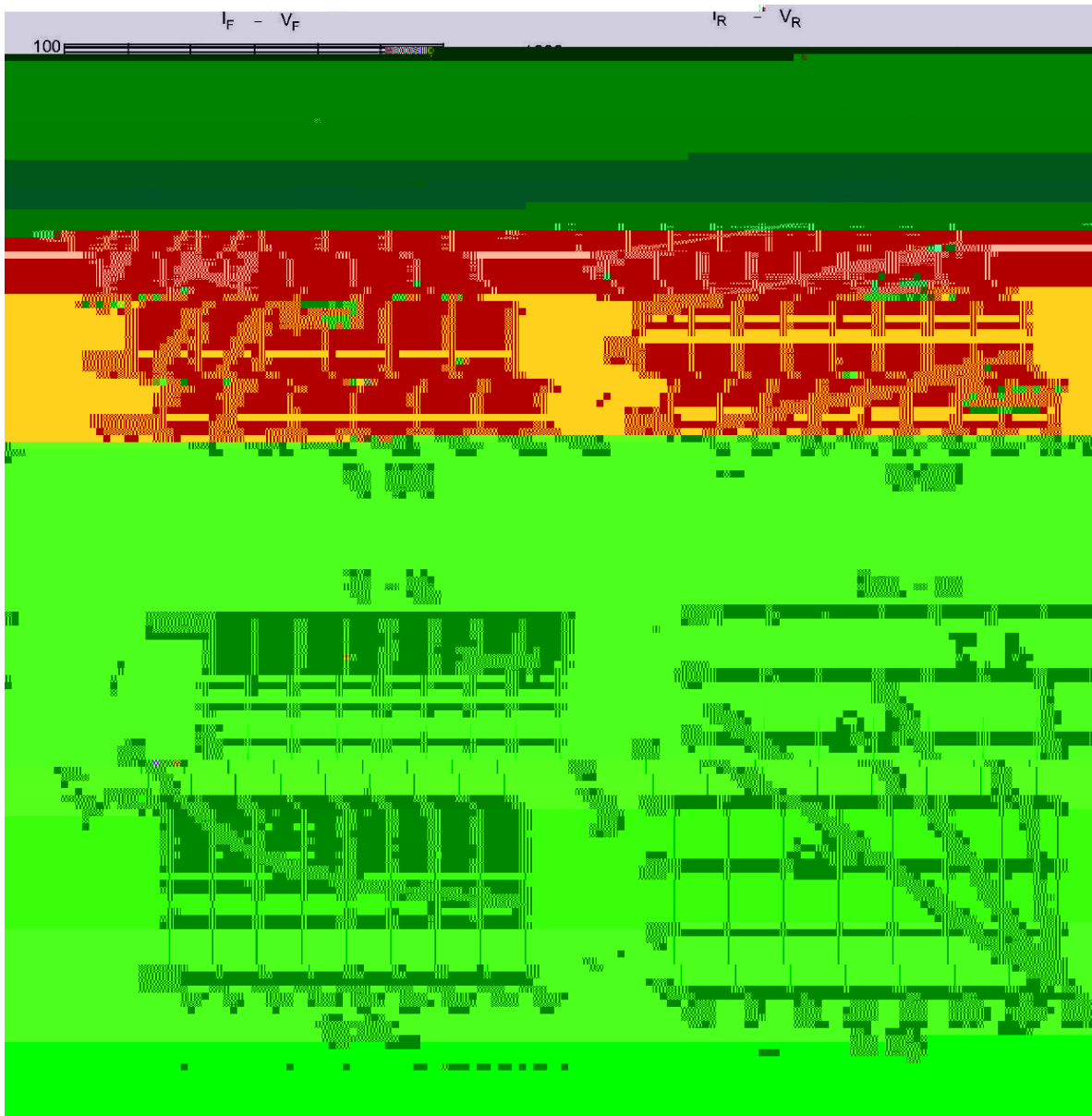
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
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	

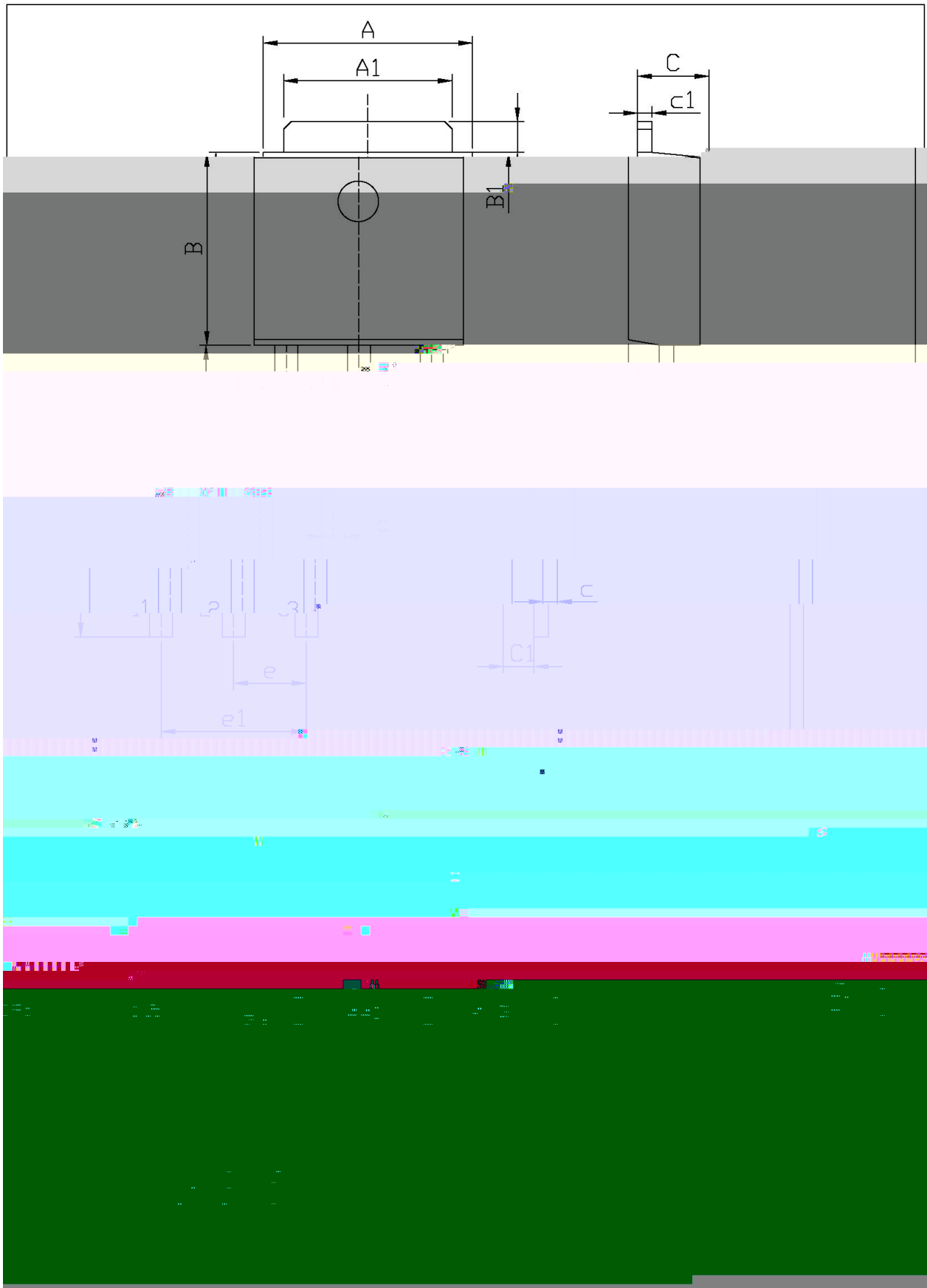
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=1\text{mA}$	45			V
Peak Forward Voltage	V_{FM}	$I_F=5\text{A}(T_C=25^\circ\text{C})$		0.41	0.49	V
		$I_F=5\text{A}(T_C=125^\circ\text{C})$		0.37	0.41	V
		$I_F=10\text{A}(T_C=25^\circ\text{C})$		0.47	0.55	V
Instantaneous Reverse Current	I_{RM}	$V_R=40\text{V}(T_C=25^\circ\text{C})$			0.50	mA
		$V_R=40\text{V}(T_C=125^\circ\text{C})$			50	mA
Voltage Rate of Change	dv/dt				10000	V/ μs

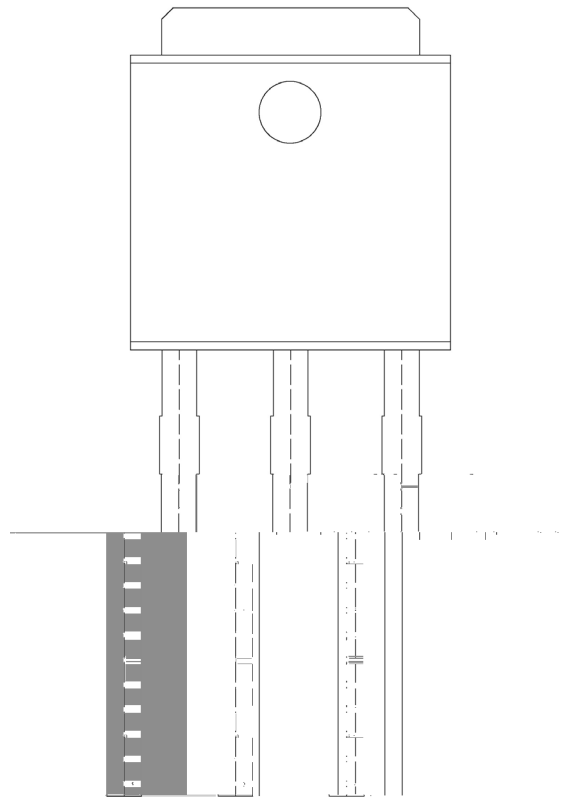
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MBRI1045

Note:

BR: Company Code

MBRI1045 Product Type.

****: 1

() / 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-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ 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
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices