

/ Descriptions

TO-252

Schottky Barrier Diode in a TO-252 Plastic Package.

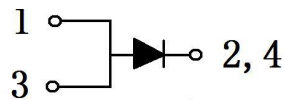
/ Features

High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

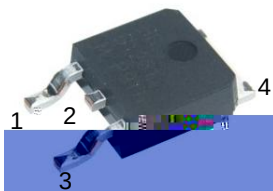
/ Applications

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

/ h_{FE} Classifications & Marking

See Marking Instructions.

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

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	150	V
RMS Reverse Voltage	$V_{R(RMS)}$	105	V
Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current	I_{FSM}	200	A
Typical Thermal Resistance Junction to Case	R_{JC}	6.5	$^\circ\text{C}/\text{W}$
Junction Temperature Range	$T_{J\text{ MAX}}$	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 150	$^\circ\text{C}$

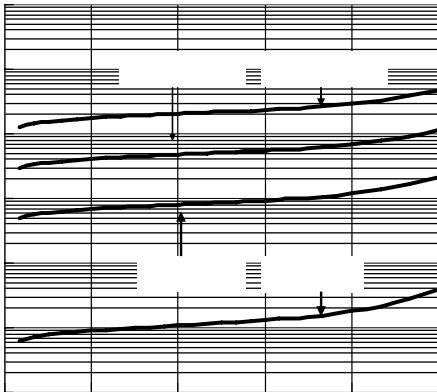
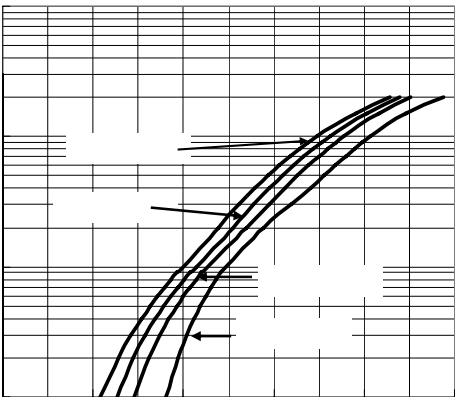
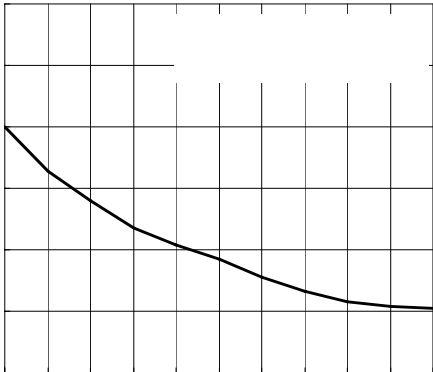
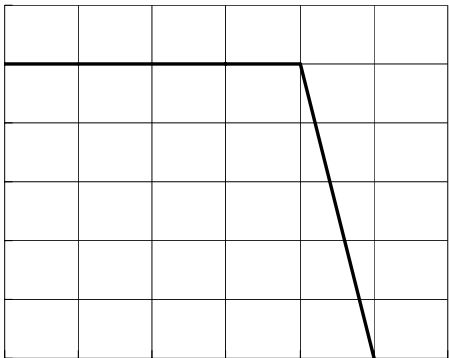
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=0.3\text{mA}$	150			V
Forward Voltage	V_F	$I_F=2\text{A}$ $T_J=25^\circ\text{C}$		0.57	0.60	V
		$I_F=2\text{A}$ $T_J=125^\circ\text{C}$		0.47	0.55	V
		$I_F=10\text{A}$ $T_J=25^\circ\text{C}$		0.81	0.85	V
		$I_F=10\text{A}$ $T_J=125^\circ\text{C}$		0.69	0.75	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100\text{V}$ $T_J=25^\circ\text{C}$		5	50	μA
		$V_R=100\text{V}$ $T_J=100^\circ\text{C}$			10	mA
		$V_R=100\text{V}$ $T_J=125^\circ\text{C}$			20	mA

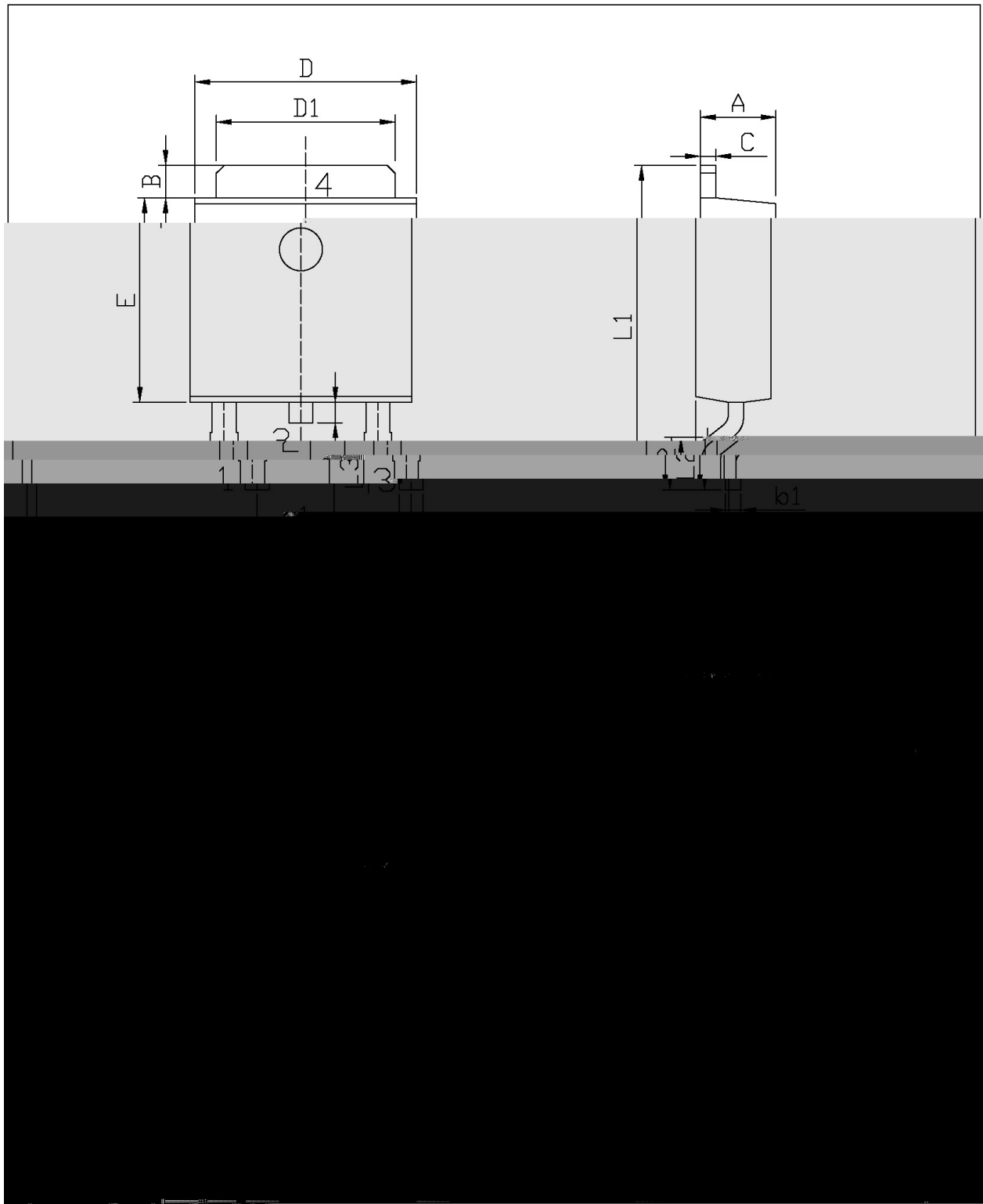
/Notes

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

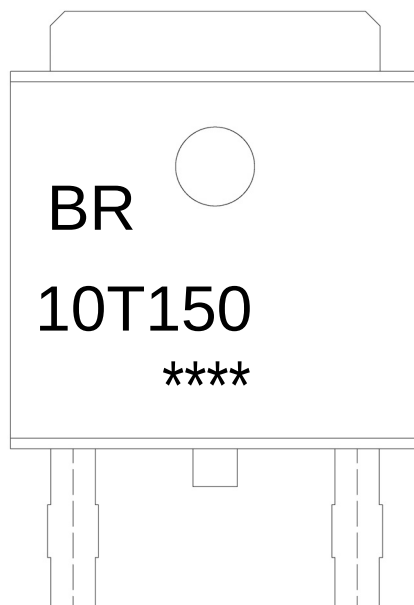
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

10T150

Note:

BR:

Company Code

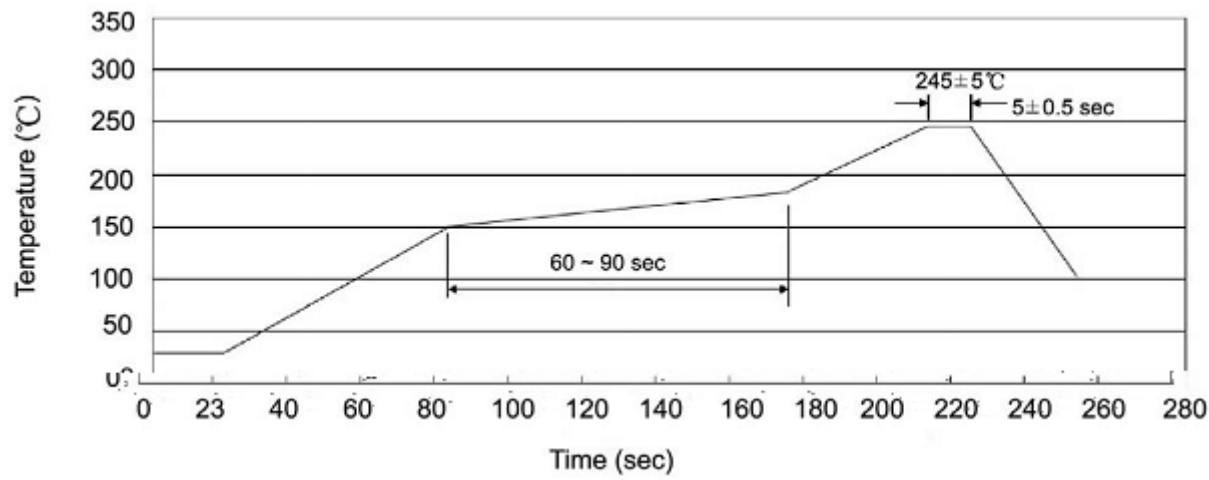
10T150

Product Type Code.

****:

Lot No. Code, code change with Lot No.

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



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	5	25,000	13 ×16	360×360×50	s 385×257×392