

/ Descriptions

TO-252

Schottky Diode in a TO-252 Plastic Package.

/ Features

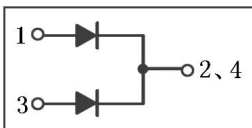
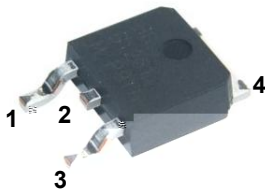
Low forward voltage drop, low power losses, High efficiency operation.

/ Applications

OR-ing

DC-DC

For use in high frequency inverters, switching power supplies, freewheeling diodes,
OR-ing diode, dc-to-dc converters and reverse battery protection.

/ 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_{RMS}	105	V
Average Rectified Forward Current	$I_{F(AV)}$	2 5	A
Non Repetitive Peak Surge Current	I_{FSM}	80	A
Typical Thermal Resistance Junction to Case	R_{JC}	6.5	/W
Junction and Storage Temperature Range	$T_{stg} T_j$	-55 150	

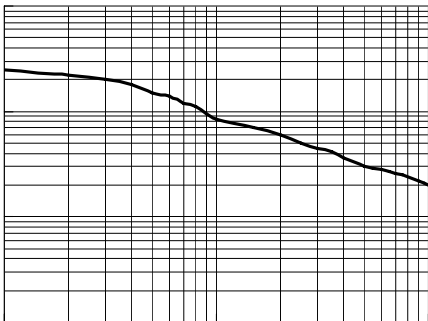
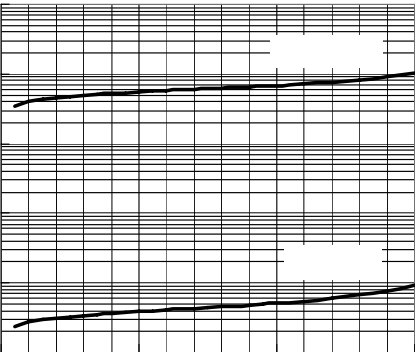
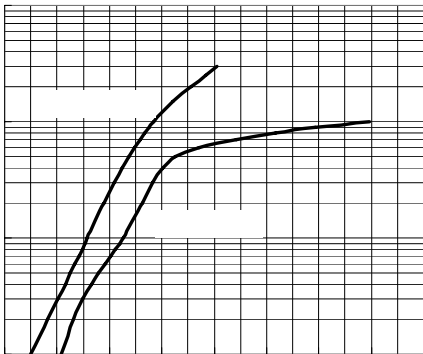
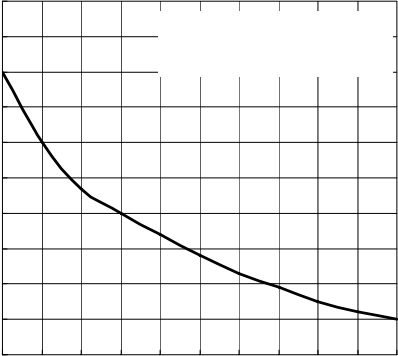
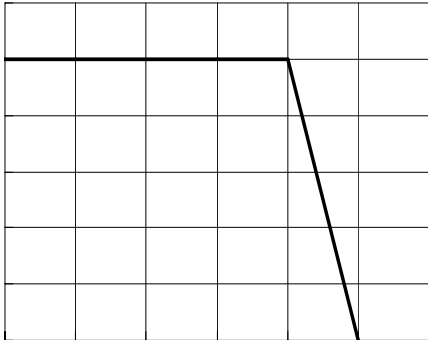
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=1\text{mA}$ $T_a=25^\circ\text{C}$	150			V
Forward Voltage	V_F	$I_F=3\text{A}$ $T_a=25^\circ\text{C}$		0.76	0.83	V
		$I_F=5\text{A}$ $T_a=25^\circ\text{C}$		0.86	0.95	V
		$I_F=3\text{A}$ $T_a=125^\circ\text{C}$		0.61		V
		$I_F=5\text{A}$ $T_a=125^\circ\text{C}$		0.67	0.75	V
Instantaneous Reverse Current	I_R Note 1	$V_R=150\text{V}$ $T_a=25^\circ\text{C}$			15	μA
		$V_R=150\text{V}$ $T_a=125^\circ\text{C}$		1.0	5.0	mA

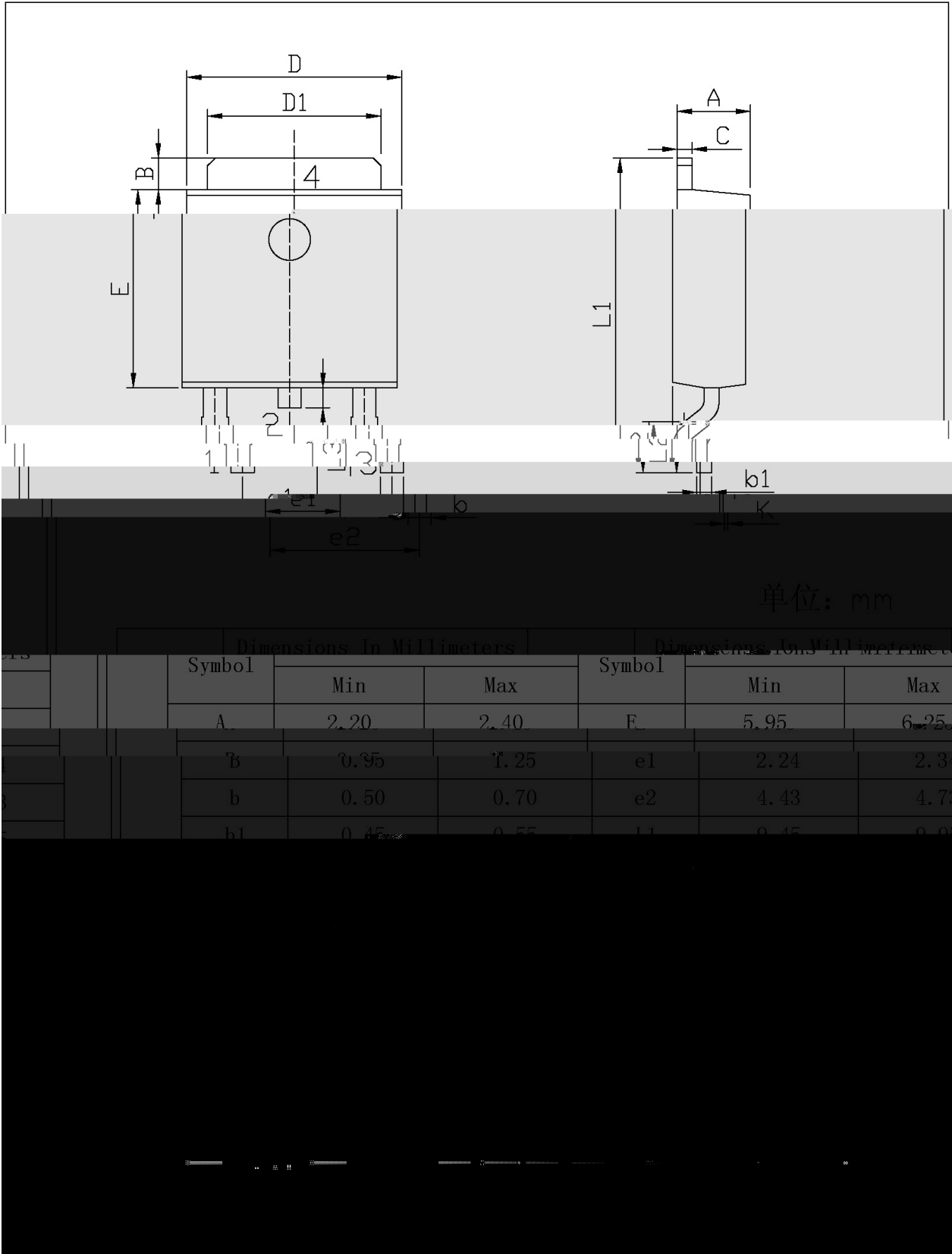
/Notes

1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip.

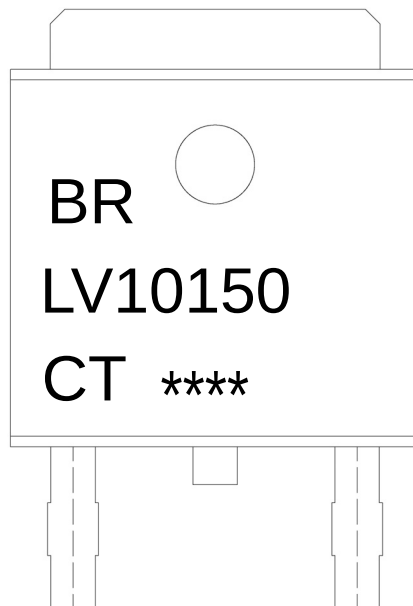
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

LV10150

CT:

Note:

BR:

Company Code

LV10150

Product Type.

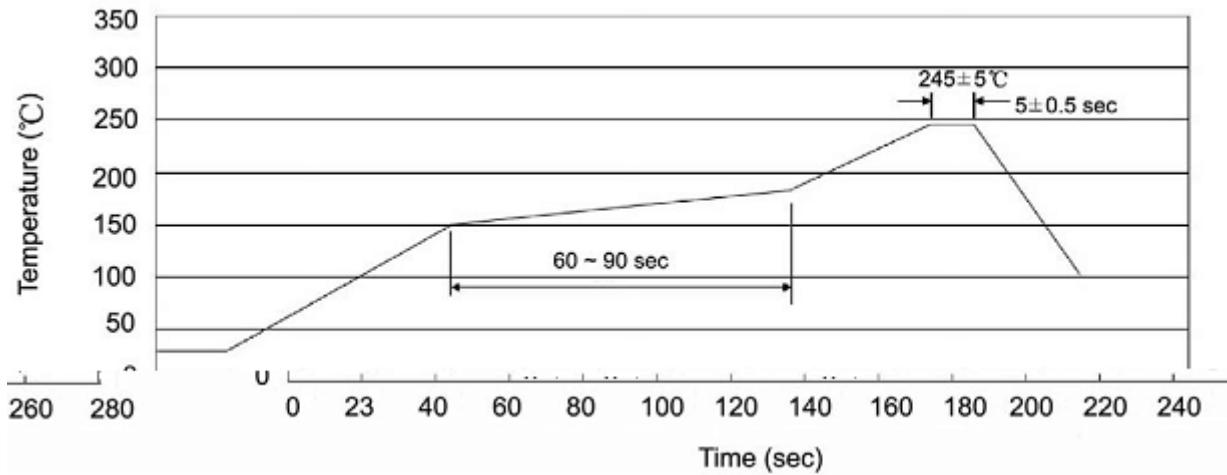
CT:

Internal Structure

****:

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	385×257×392

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices