

LV10T150D

Rev.F May.-2016

/ Descriptions

TO-252

Schottky Barrier Diode in a TO-252 Plastic Package.

/ Features

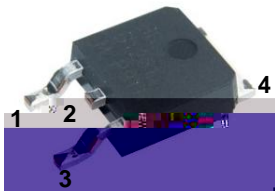
High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

/ 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($T_a=25$)

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	/W
Junction Temperature Range	T_{jMAX}	150	
Storage Temperature Range	T_{stg}	-55 150	

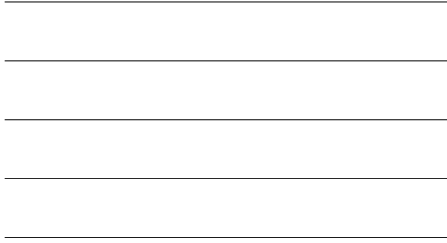
/ Electrical Characteristics($T_a=25$)

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

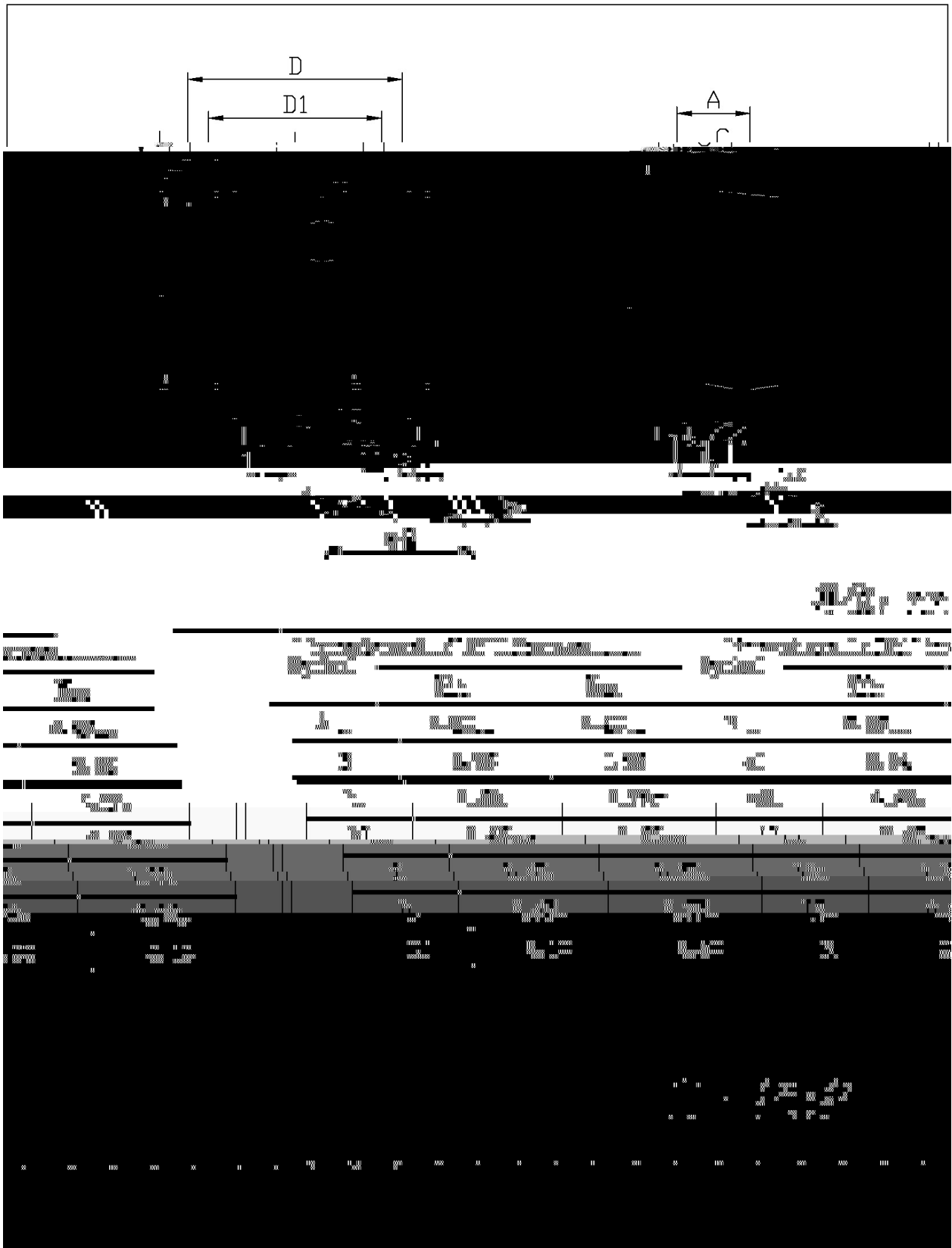
/Notes

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

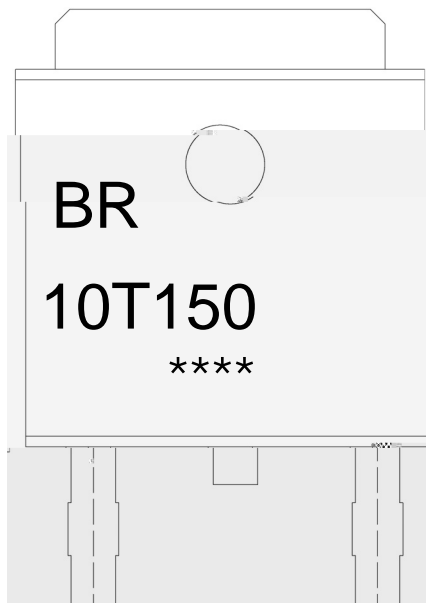
/ **Electrical Characteristic Curve**



/ Package Dimensions



/ Marking Instructions



BR

10T150

Note:

BR:

Company Code

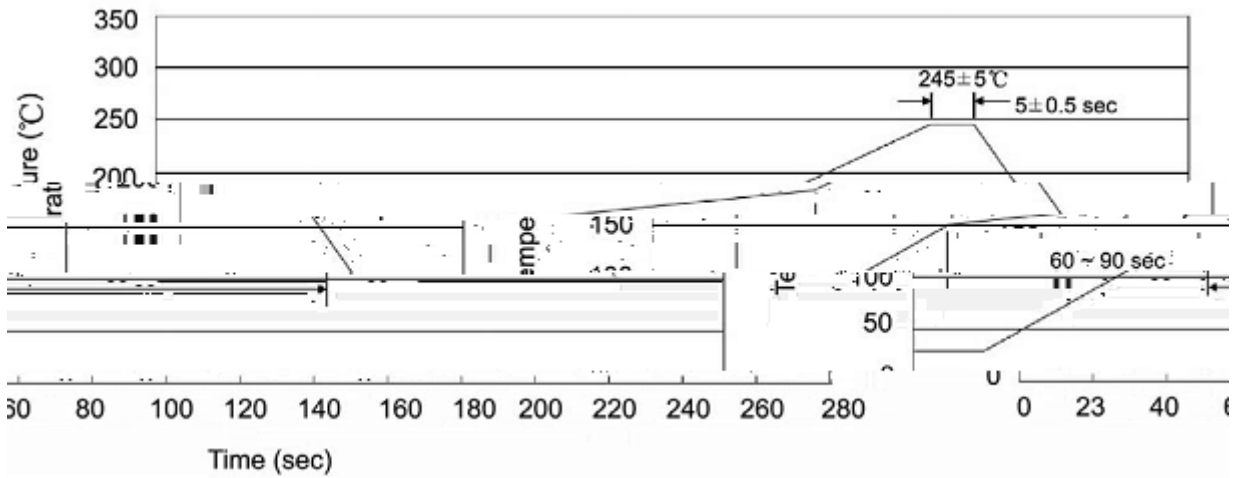
10T150

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±0.5 | sec; | 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	5	25,000	13 ×16	360×360×50	385×257×392