

# LV40150CT

Rev.H Oct.-2018

## / Descriptions

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

## / Features

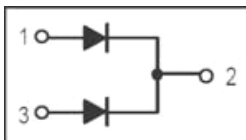
Low forward voltage drop   low power losses   High efficiency operation.

## / Applications

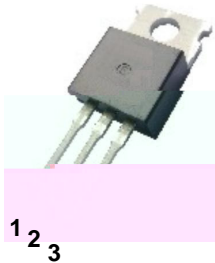
OR-ing      DC-DC

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 Cathode      PIN 3 Anode

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RM}$ $V_{RSM}$ $V_{DC}$	150	V
RMS Reverse Voltage	$V_{RMS}$	105	V
Average Rectified Forward Current	$I_{F(AV)}$	2×20	A
Non Repetitive Peak Surge Current	$I_{FSM}$	300	A
Thermal Resistance Junction to Case	$R_{Jc}$	2.8	/W
Junction and Storage Temperature Range	$T_j, T_{stg}$	-40 +150	

**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{BR}$	$I_R=1mA(Ta=25 )$	150			V
Forward Voltage	$V_F$	$I_F=5A(Ta=25 )$		0.68		V
		$I_F=10A(Ta=25 )$		0.76		V
		$I_F=20A(Ta=25 )$		0.89	1.05	V
		$I_F=5A(Ta=125 )$		0.56		V
		$I_F=10A(Ta=125 )$		0.63		V
		$I_F=20A(Ta=125 )$		0.73	0.85	V
Instantaneous Reverse Current	$I_R$ Note 1	$V_{BR}=150V(Ta=25 )$		3.0	30	uA
		$V_{BR}=150V(Ta=125 )$		5.0	15	mA

## /Notes

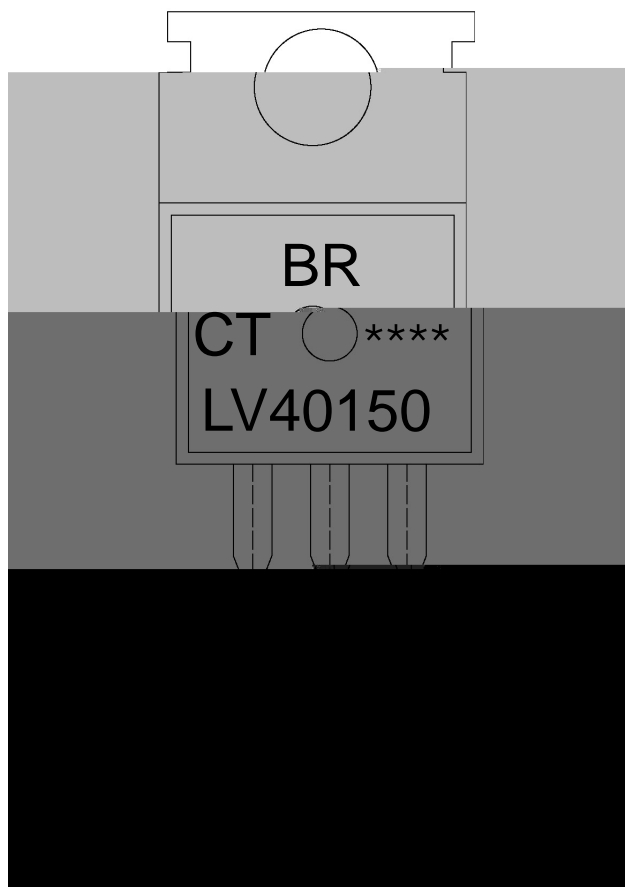
1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip



/ Package Dimensions



/ Marking Instructions



BR

LV40150

CT:

\*\*\*\*

Note:

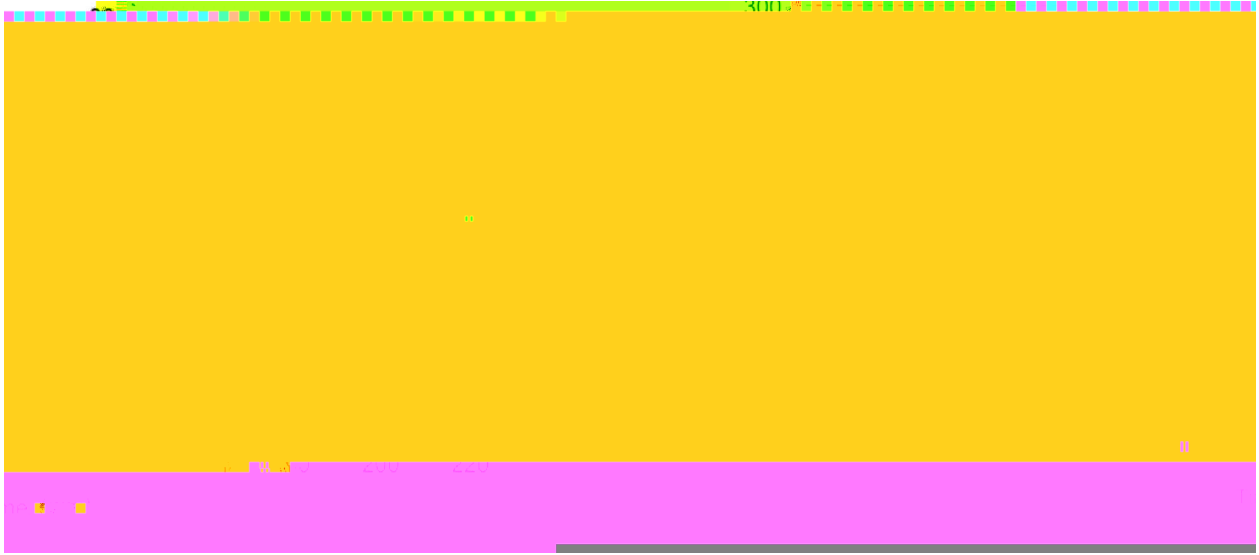
BR: Company Code

LV40150 Product Type.

CT: Internal Structure

\*\*\*\*: Lot No. Code, code change with Lot No.

( ) / 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices