/ Descriptions

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

/ Features

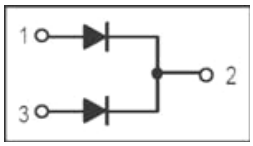
Low forward voltage drop low power losses High efficiency operation.

/ 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_{FE} 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	$R_{\theta Jc}$	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

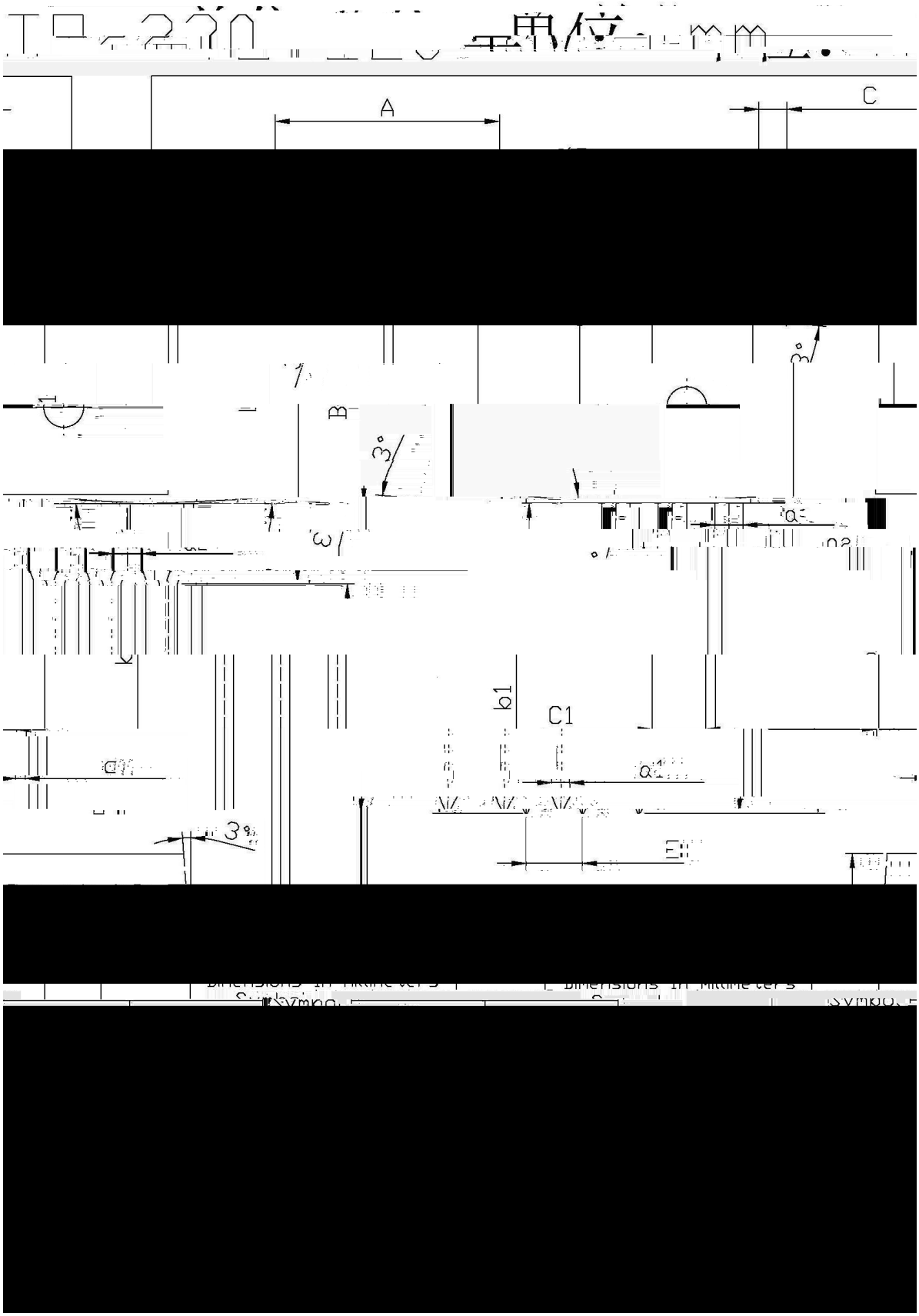
/Notes

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

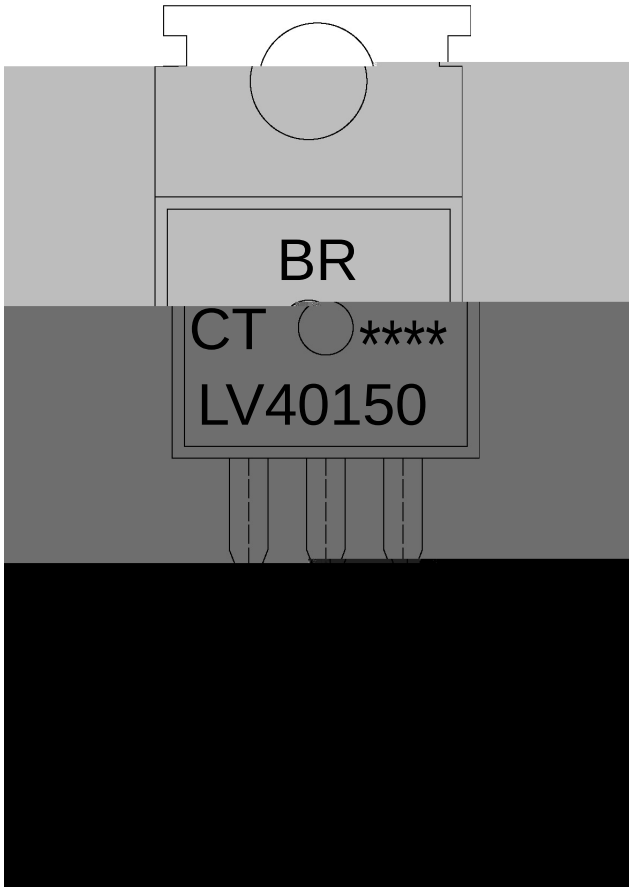
LV40150CT

Rev.H Oct.-2018

/ Package Dimensions



/ Marking Instructions



BR

LV40150

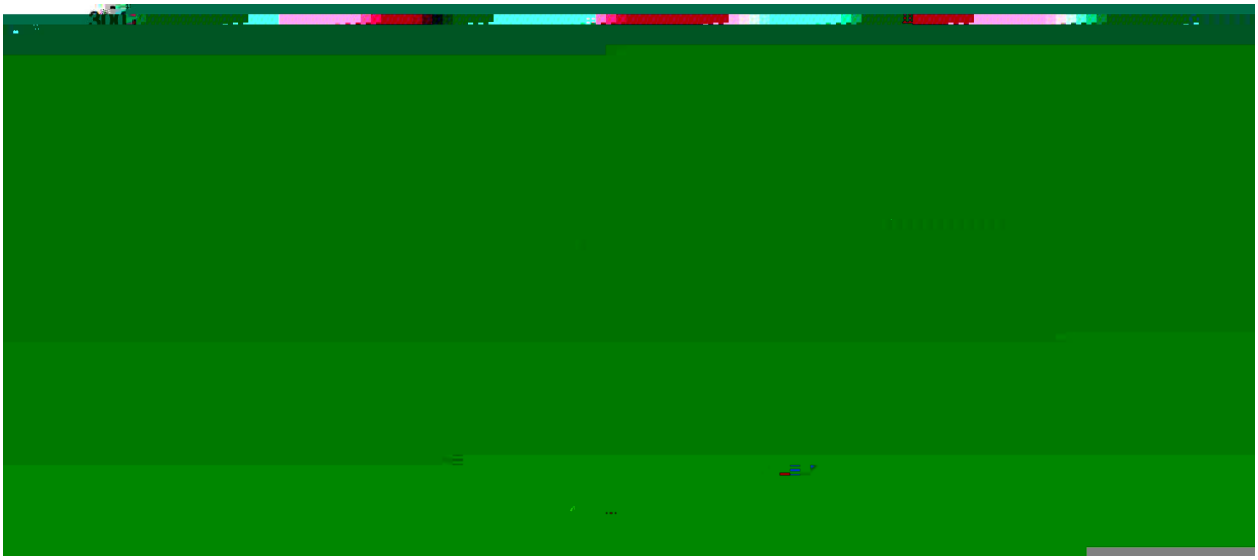
CT:

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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^3)		
	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^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-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices