

LV10100CT

Rev. H Oct.-2018

/ Descriptions

Schottky Barrier Diode in a TO-220 Plastic Package.

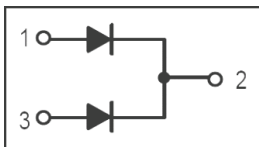
/ Features

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

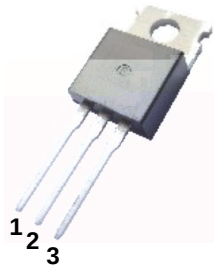
/ Applications

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.

Parameter	Symbol	Rating	Unit
Recurrent Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} , V_{RSM} V_{DC}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
Average forward rectified current	$I_{F(AV)}$	2 5	A
Non Repetitive Peak Surge Current	I_{FSM}	80	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.8	/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	

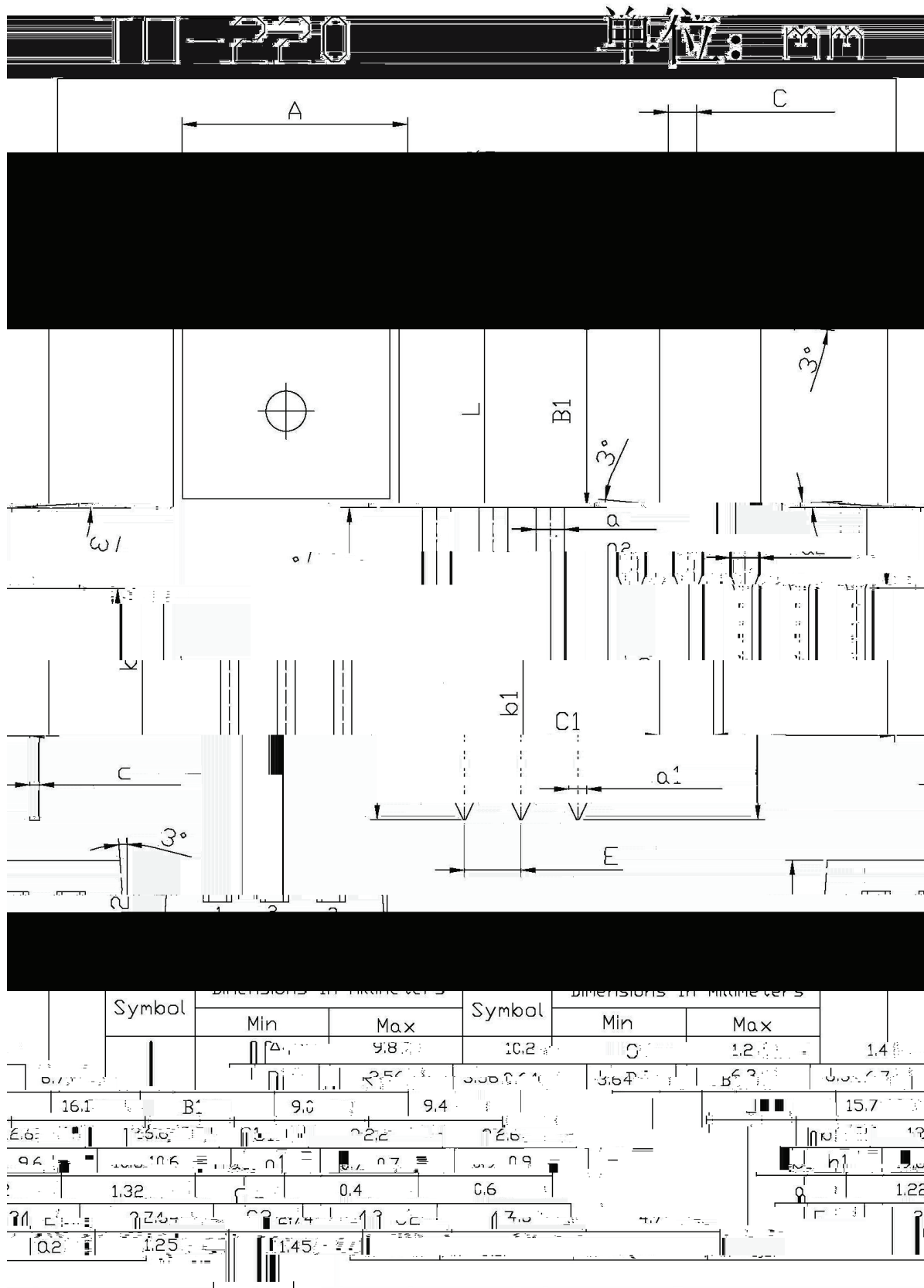
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Reverse Voltage	V_{BR}	$I_R=1mA(T_a=25^\circ C)$	100			V
Forward Voltage	V_F	$I_F=3A(T_a=25^\circ C)$		0.59		V
		$I_F=5A(T_a=25^\circ C)$		0.69	0.75	V
		$I_F=3A(T_a=125^\circ C)$		0.53		V
		$I_F=5A(T_a=125^\circ C)$		0.61	0.65	V
Instantaneous Reverse Current	I_R	$V_R=100V(T_a=25^\circ C)$		5.0	50	μA
		$V_R=100V(T_a=125^\circ C)$		3.0	10	mA

Note 1

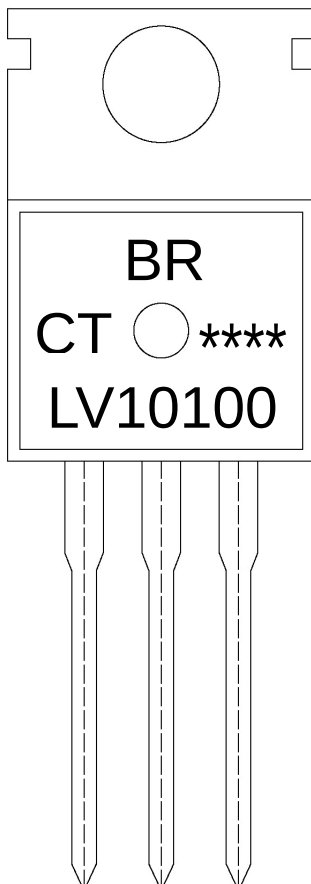
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



Note:

BR:

Company Code

LV10100

Product Type.

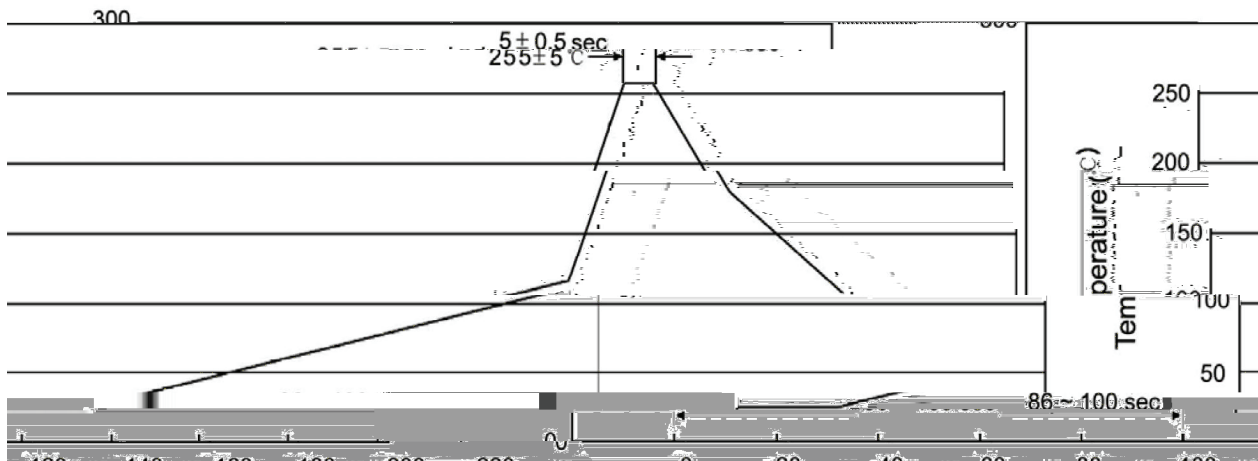
CT:

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	Units					Dimension (unit mm ³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices