

LV20100FCT

Rev.F Apr.-2018

/ Descriptions

TO-220F

Schottky Diode in a TO-220F Plastic Package.

/ Features

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

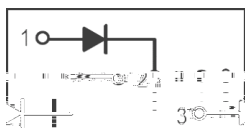
/ Applications

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}	100	V
RMS Voltage	V_{RMS}	70	V
Average Rectified Forward Current	$I_{F(AV)}$	2× 10	A
Non Repetitive Peak Surge Current	I_{FSM}	150	A
Thermal Resistance Junction to Case	R_{Jc}	4.5	°C/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25^{\circ}C)$	100			V
Forward Voltage	V_F	$I_F=5A(Ta=25^{\circ}C)$		0.55	0.65	V
		$I_F=5A(Ta=125^{\circ}C)$		0.50	0.60	V
		$I_F=10A(Ta=25^{\circ}C)$		0.73	0.79	V
		$I_F=10A(Ta=125^{\circ}C)$		0.62	0.68	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100V(Ta=25^{\circ}C)$			100	μA
		$V_R=100V(Ta=125^{\circ}C)$		10	25	mA

/Notes

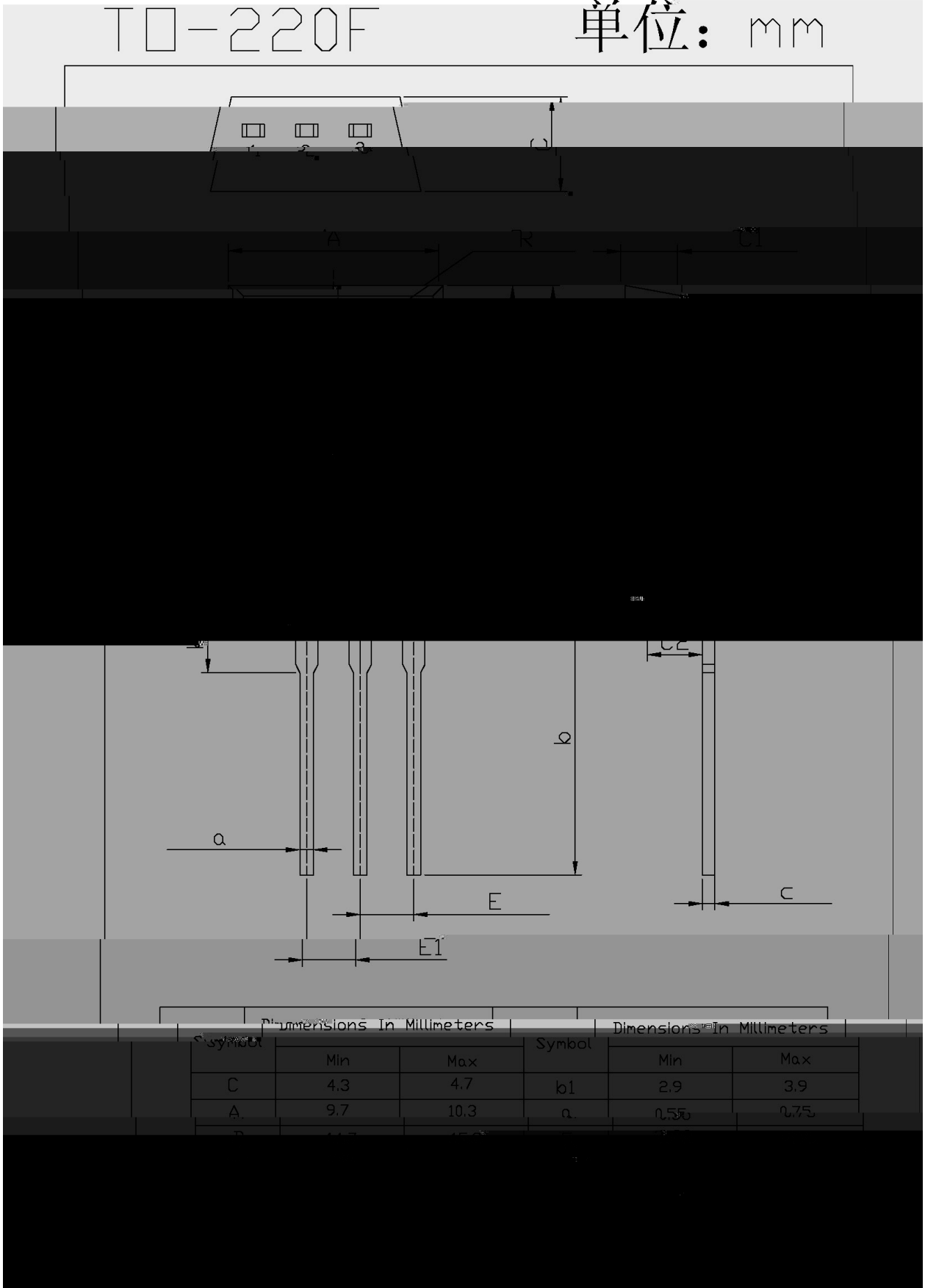
1.

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

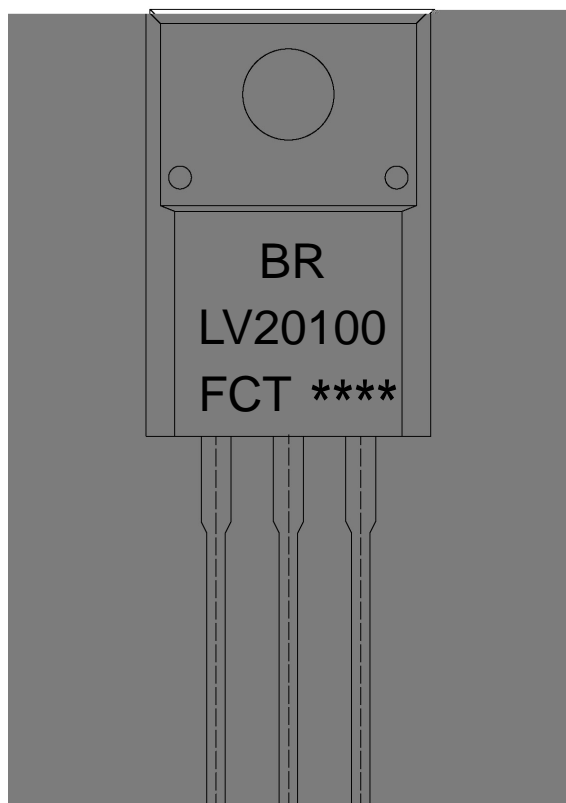
2.

Unless otherwise noted, values for the parameters of a single chip

/ Package Dimensions



/ Marking Instructions



BR

LV10100

F:

CT:

Note:

BR: Company Code

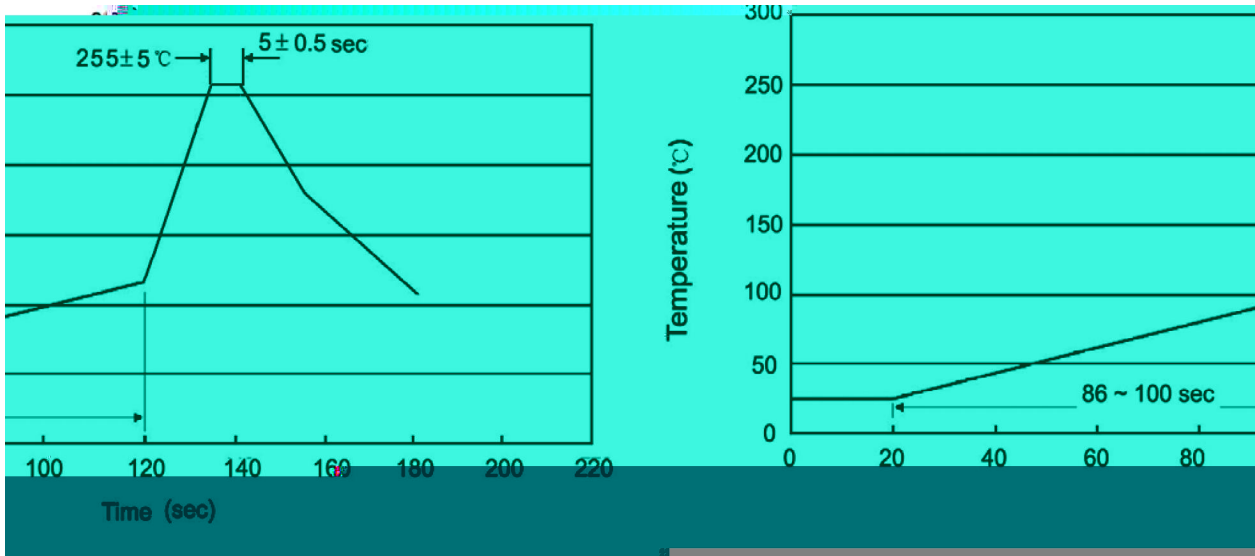
LV10100: Product Type Code.

F Package Code

CT: Internal Structure

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- 1 25 150 60 90sec;
- 2 255±5 5±0.5sec;
- 3 2 10 /sec.

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255±5 , Duration:5±0.5sec.
- 3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5

10±1 sec.

Temp.:270±5°C

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