

# LV10100FCT

Rev.E Mar.-2016

## / Descriptions

Schottky Diode in a TO-220F Plastic Package.

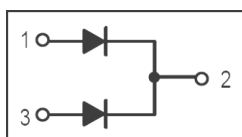
## / Features

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

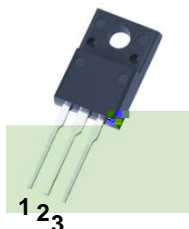
## / Applications

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<sub>FE</sub> Classifications & Marking

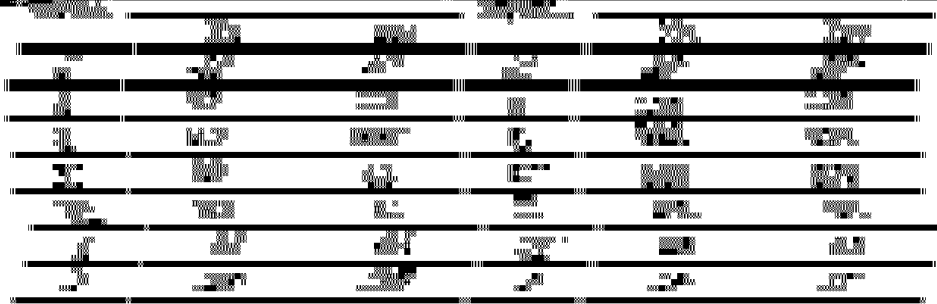
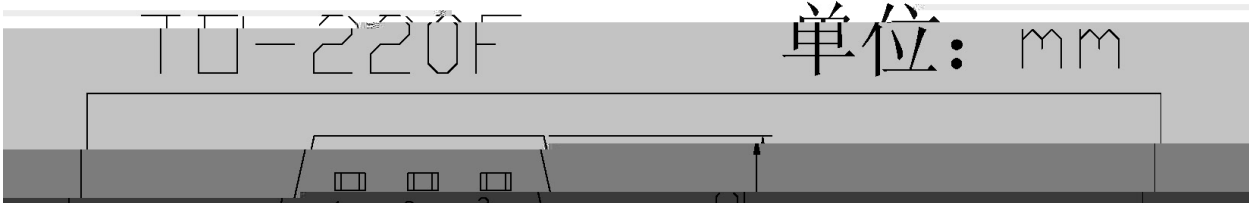
See Marking Instructions.

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× 5	A
Non Repetitive Peak Surge Current	$I_{FSM}$	80	A
Thermal Resistance Junction to Case	$R_{Jc}$	4.5	/W
Junction and Storage Temperature Range	$T_j$ $T_{stg}$	-40 +150	

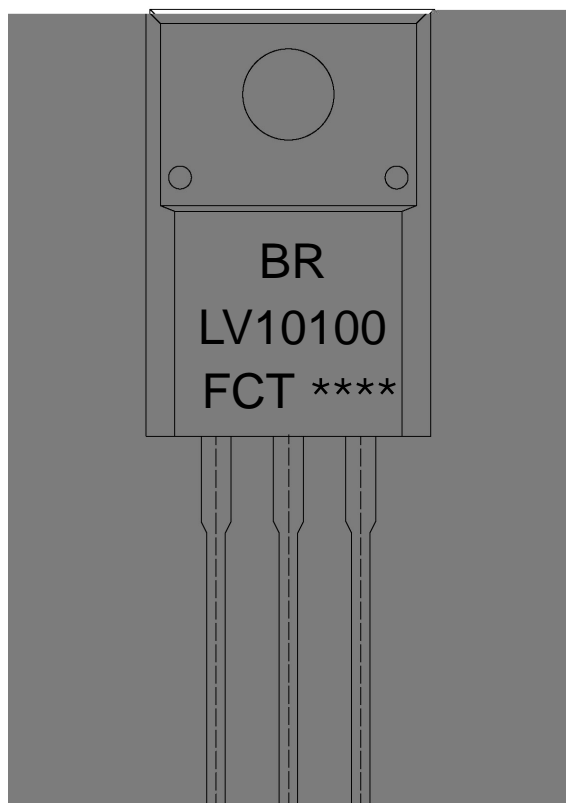
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	$V_{BR}$	$I_R=1mA(T_a=25^\circ C)$	100			V
Forward Voltage	$V_F$	$I_F=3A(T_a=25^\circ C)$		0.59	0.65	V
		$I_F=3A(T_a=125^\circ C)$		0.53	0.60	V
		$I_F=5A(T_a=25^\circ C)$		0.69	0.75	V
		$I_F=5A(T_a=125^\circ C)$		0.61	0.65	V
Instantaneous Reverse Current	$I_R$ Note 1	$V_R=100V(T_a=25^\circ C)$			50	A
		$V_R=100V(T_a=125^\circ C)$		3.0	10	mA



/ Package Dimensions



/ Marking Instructions



BR

LV10100

F

CT

Note:

BR: Company Code

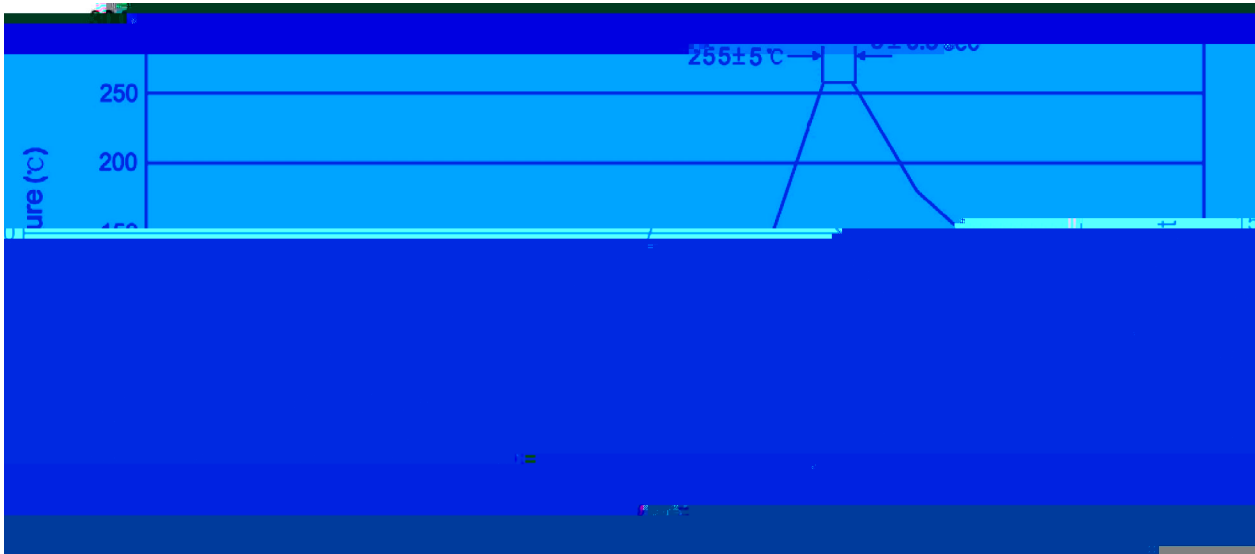
LV10100: Product Type Code.

F Package Code

CT: Internal Structure

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

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



- |   |     |     |    |          |       |   |
|---|-----|-----|----|----------|-------|---|
| 1 | 25  | 150 | 60 | 90sec;   | Note: | 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 <sup>3</sup> )		
	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 <sup>3</sup> )
Units/Tube/bn T /		