

LV3045FCT

Rev.F Mar.-2016

/ Descriptions

TO-220F

Schottky Barrier Diode in a TO-220F Plastic Package.

/ Features

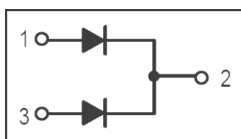
Low forward voltage drop, low power losses, High efficiency operation.

/ 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	V_{RRM}	45	V
Average Rectified Forward Current(total)	$I_{F(AV)}$	2 15	A
Non Repetitive Peak Surge Current	I_{FSM}	250	A
Thermal Resistance Junction to Case	R_{Jc}	3.5	°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}	$I_R=1mA(Ta=25^{\circ}C)$	45			V
Forward Voltage	V_F	$I_F=5A(Ta=25^{\circ}C)$		0.38	0.45	V
		$I_F=15A(Ta=25^{\circ}C)$		0.48	0.55	V
		$I_F=5A(Ta=125^{\circ}C)$		0.28	0.35	V
		$I_F=15A(Ta=125^{\circ}C)$		0.45	0.50	V
Instantaneous Reverse Current	I_R Note 1	$V_R=45V(Ta=25^{\circ}C)$			200	μA
		$V_R=45V(Ta=125^{\circ}C)$		40	100	mA

/Notes

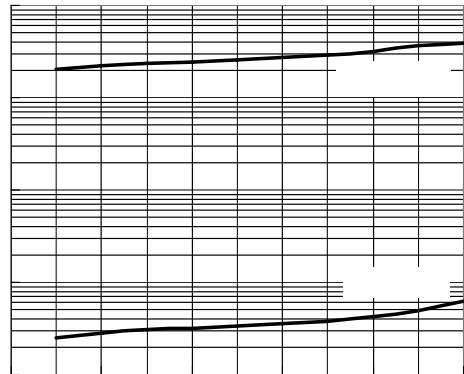
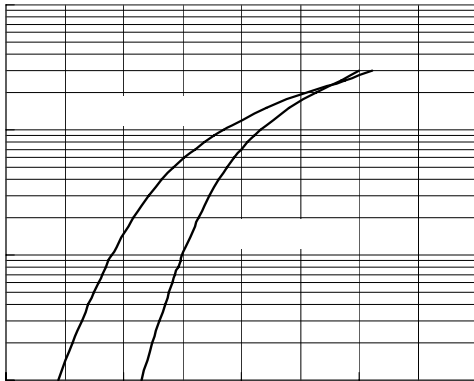
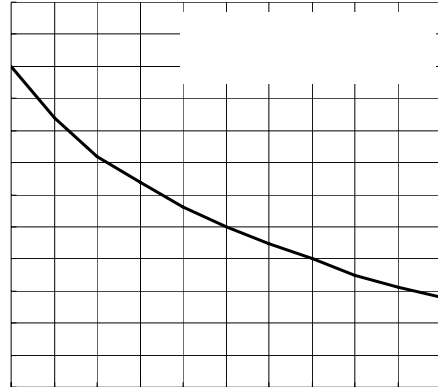
1.

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

2.

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

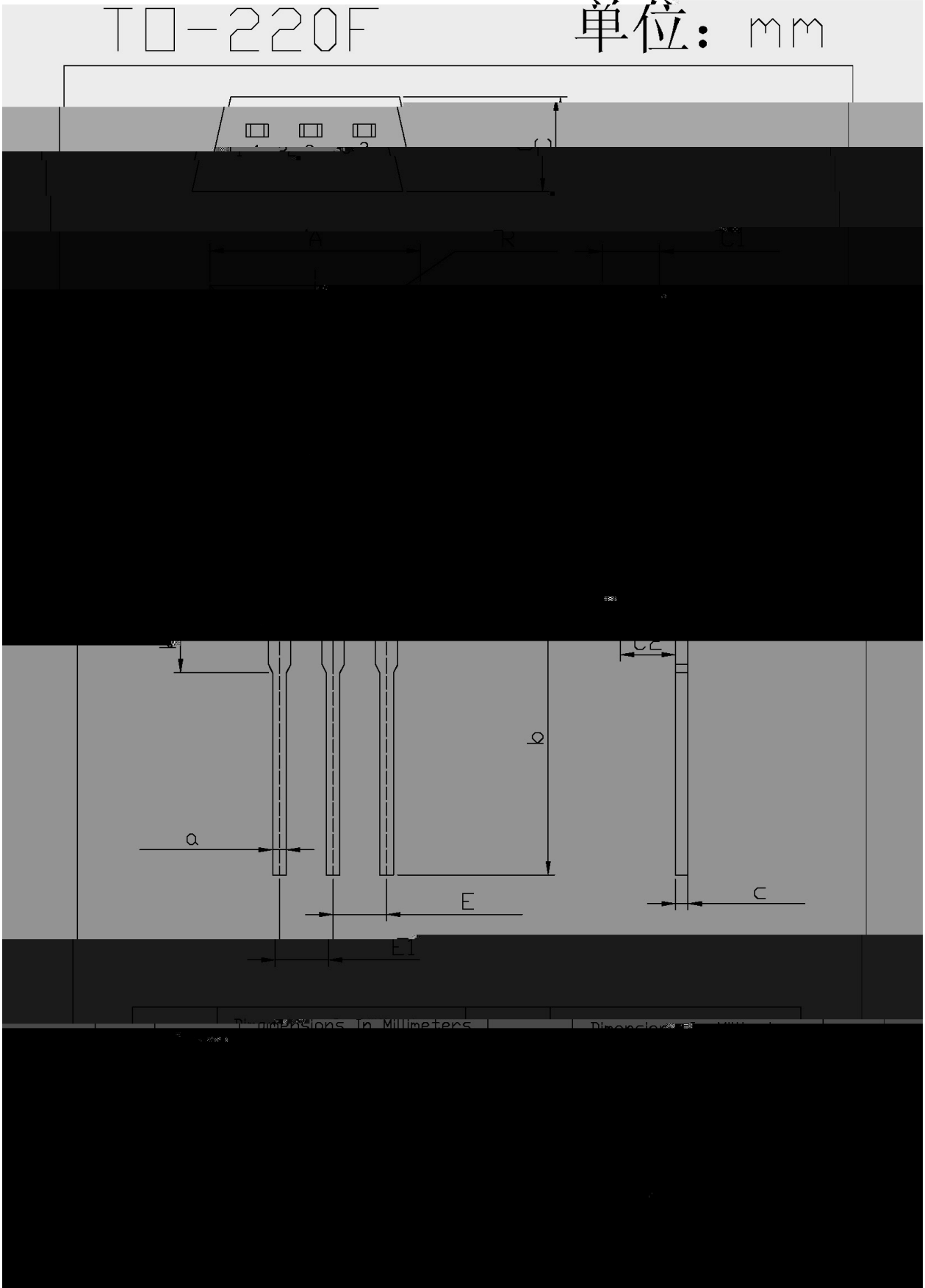
/ Electrical Characteristic Curve



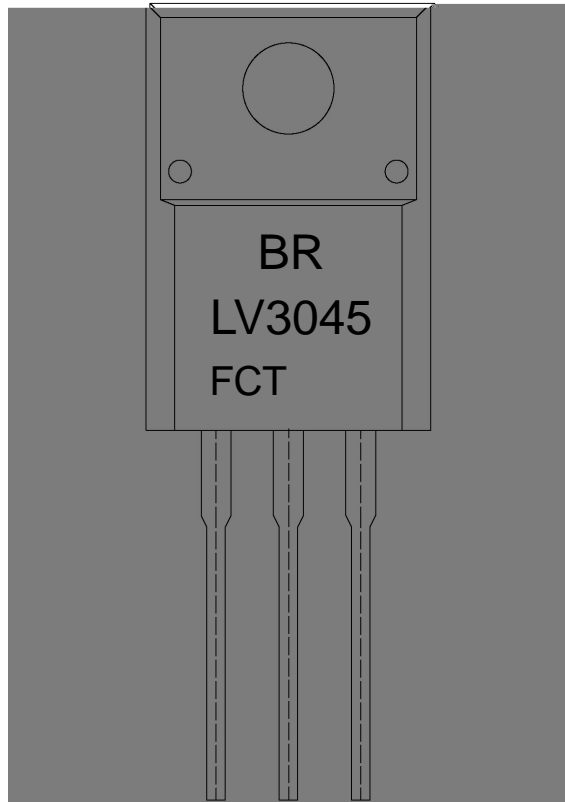
/ Package Dimensions

TO-220F

单位: mm



/ Marking Instructions



BR

LV3045

F:

CT:

Note:

BR: Company Code

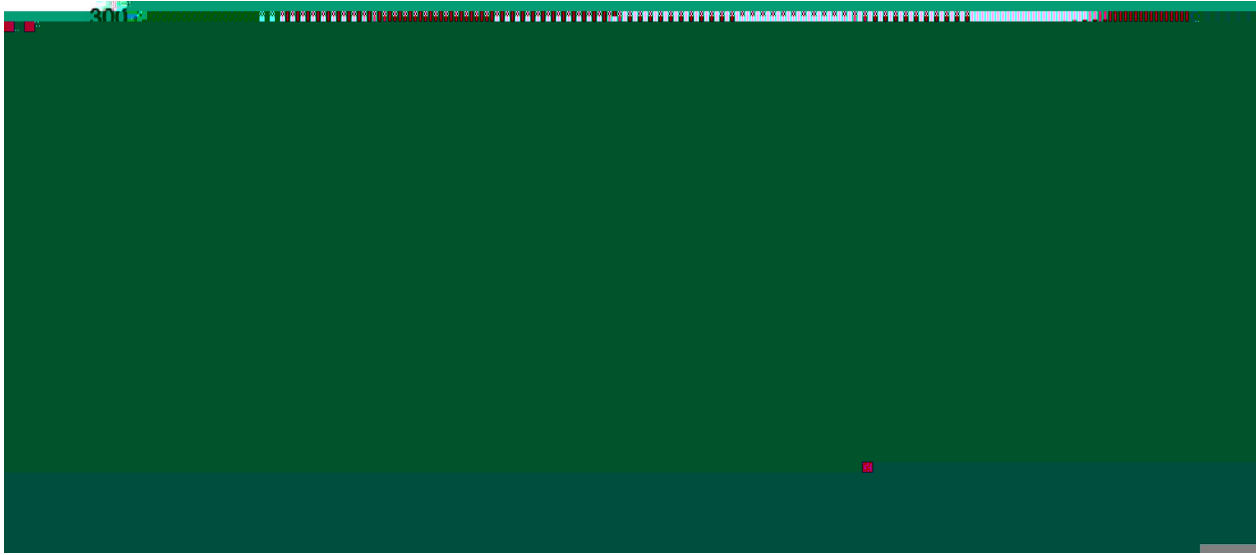
LV3045: Product Type.

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; | 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)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只套管	套管盒	只盒	盒箱	只箱	套管	盒	箱

/ Notices