

LV2045BCT

Rev.F May.-2016

/ Descriptions

Schottky Barrier Diode in a TO-263 Plastic Package.

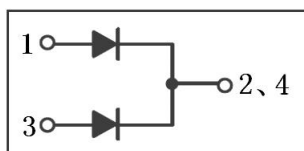
/ Features

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 4 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 Reverse Voltage	V_{RRM} V_{RWM} V_{DC}	45	V
RMS Reverse Voltage	V_{RMS}	31.5	V
Average forward rectified Current	I_F	2 X 10	A
Non Repetitive Peak Surge Current	I_{FSM}	160	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.8	°C/W
Junction and Storage Temperature Range	$T_j T_{stg}$	-40~+150	°C

/ Electrical Characteristics(Ta=25)

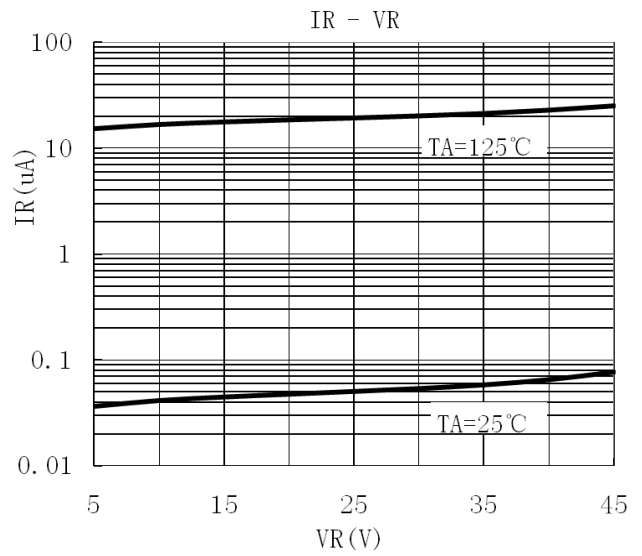
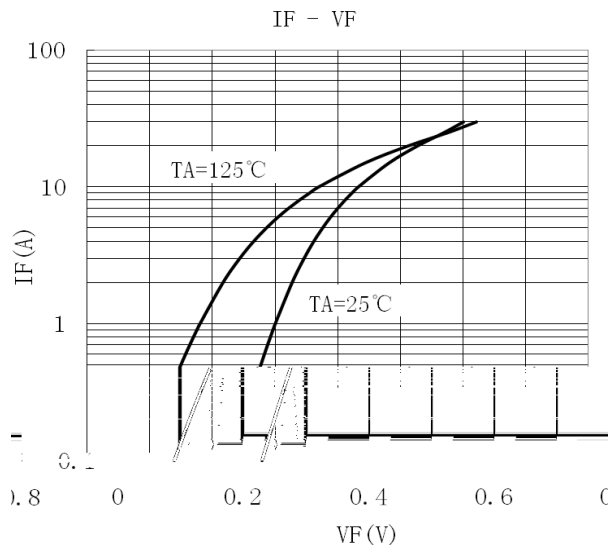
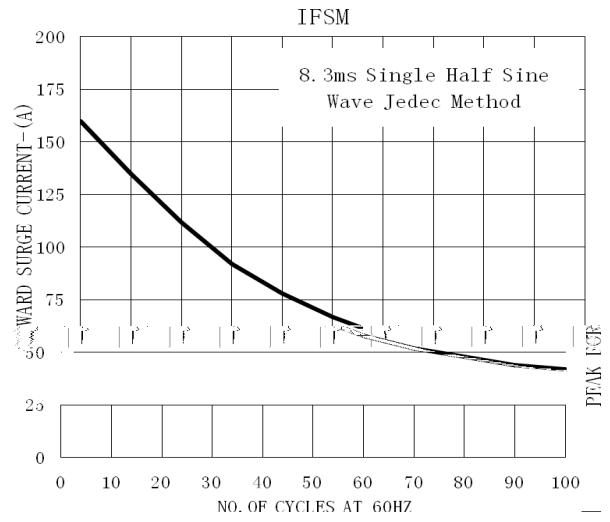
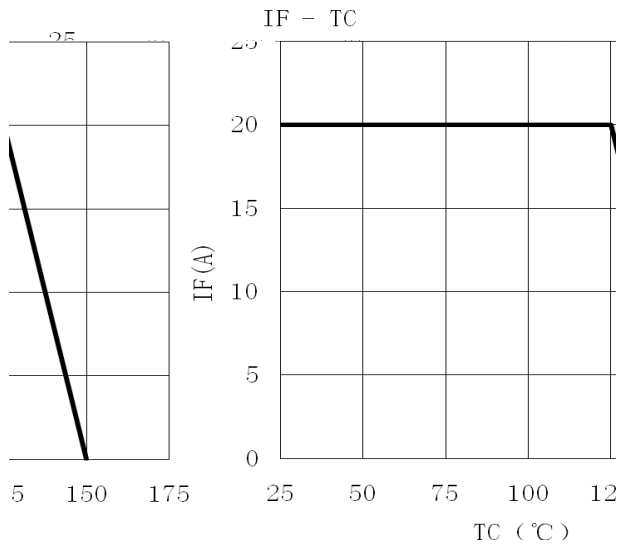
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	$I_R=1mA$ $T_a=25$	45			V
Forward Voltage	V_{FM}	$I_F=5.0A$ $T_a=25^{\circ}C$		0.38		V
		$I_F=10A$ $T_a=25^{\circ}C$		0.43	0.48	V
		$I_F=5.0A$ $T_a=125$		0.28		V
		$I_F=10A$ $T_a=125$		0.37	0.45	V
Instantaneous Reverse Current	I_R Note 1	$V_R=45V$ $T_a=25$		80	200	uA
		$V_R=45V$ $T_a=125$		30	100	mA

/Notes

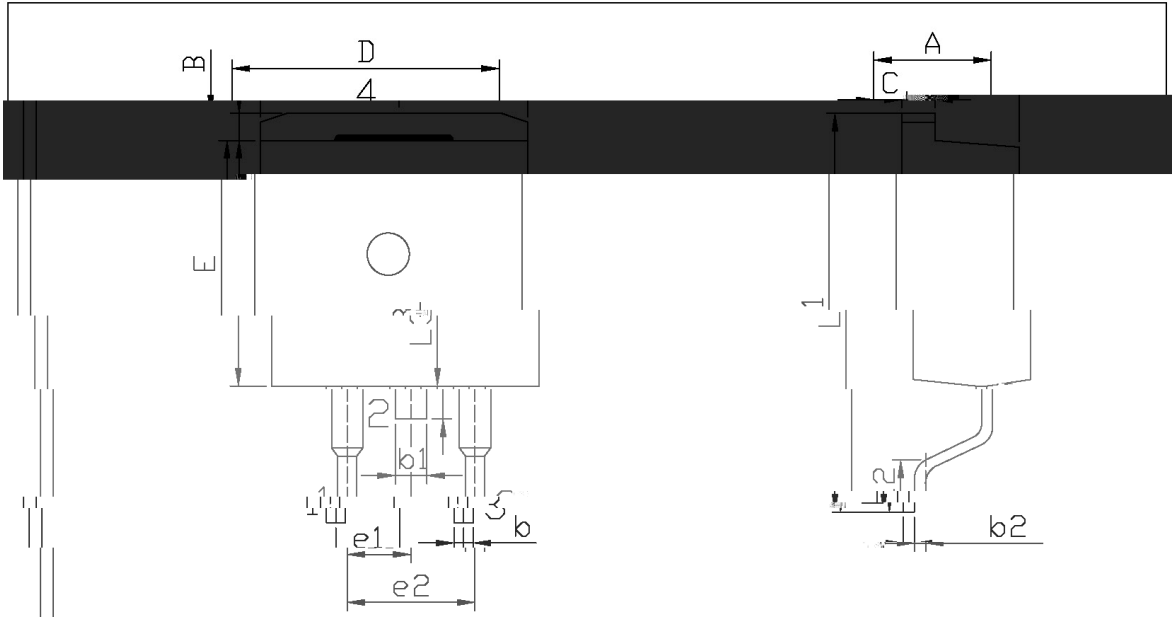
/Short duration pulse test used to minimize self-heating effect.

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

/ Electrical Characteristic Curve



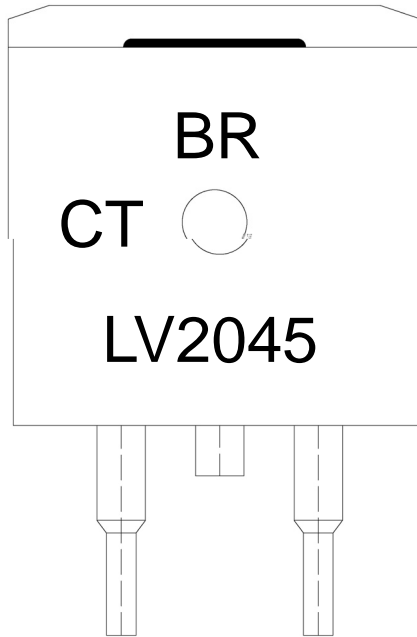
/ Package Dimensions



单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74

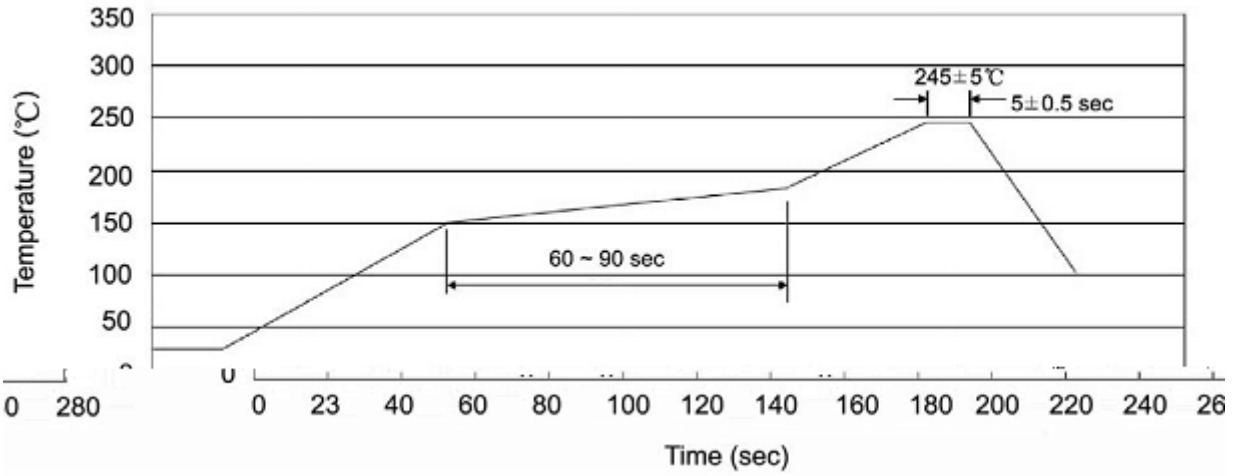
/ Marking Instructions



Note:

BR:	Company Code
:	Product Type.
:	Internal Structure
****:	Lot No. Code, code change with Lot No.

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Note:

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|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5°C Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices