

LV20150BCT

Rev.E May.-2016

/ Descriptions

Schottky Diode in a TO-263F Plastic Package.

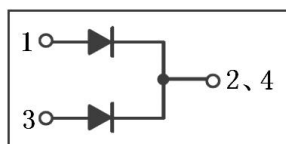
/ Features

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
Recurrent Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	150	V
RMS Voltage	V_{RMS}	105	V
Average Rectified Forward Current	$I_{F(AV)}$	2× 10	A
Non Repetitive Peak Surge Current	I_{FSM}	120	A
Thermal Resistance Junction to Case	R_{Jc}	5.0	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 +150	

/ Electrical Characteristics(Ta=25)

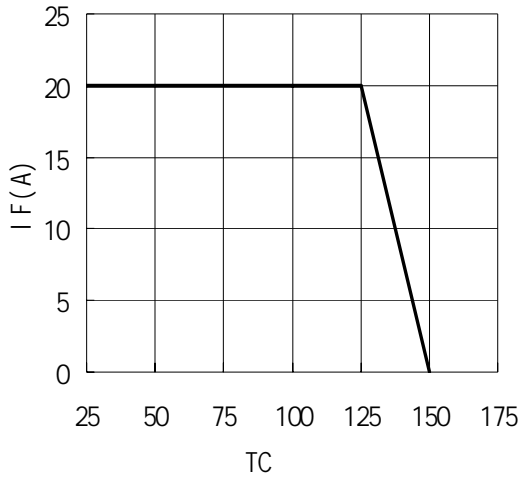
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25)$	150			V
Forward Voltage	V_F	$I_F=5A(Ta=25)$		0.74		V
		$I_F=10A(Ta=25)$		0.84	0.95	V
		$I_F=5A(Ta=125)$		0.59		V
		$I_F=10A(Ta=125)$		0.69	0.75	V
Instantaneous Reverse Current	I_R Note 1	$V_R=150V(Ta=25)$			50	μA
		$V_R=150V(Ta=125)$		3.0	10	mA

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

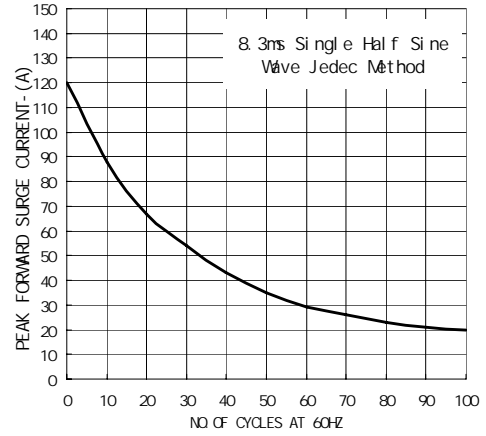
Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

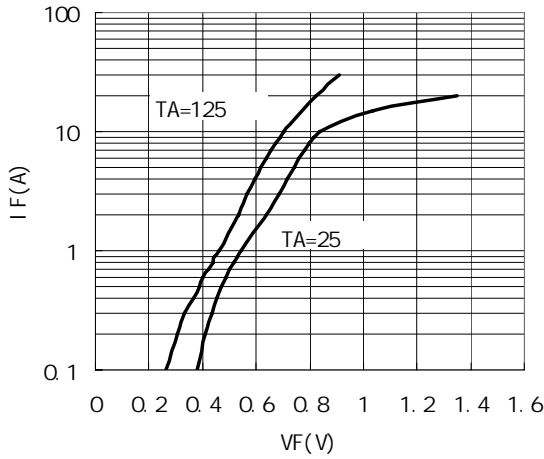
IF - TC



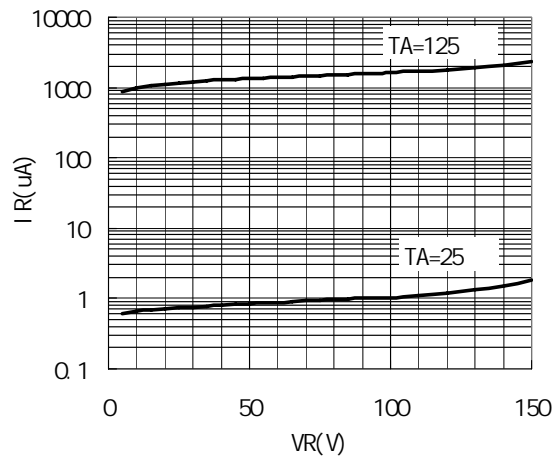
IFSM



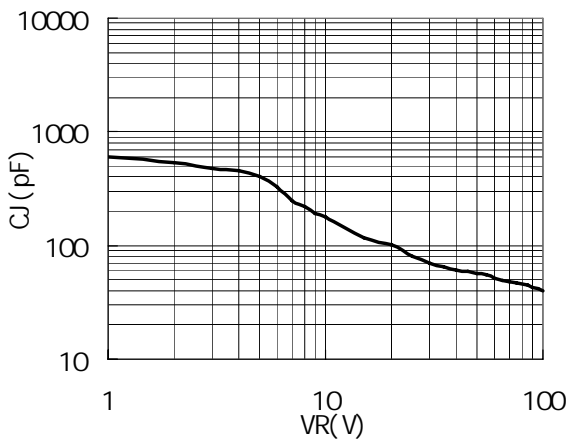
IF - VF



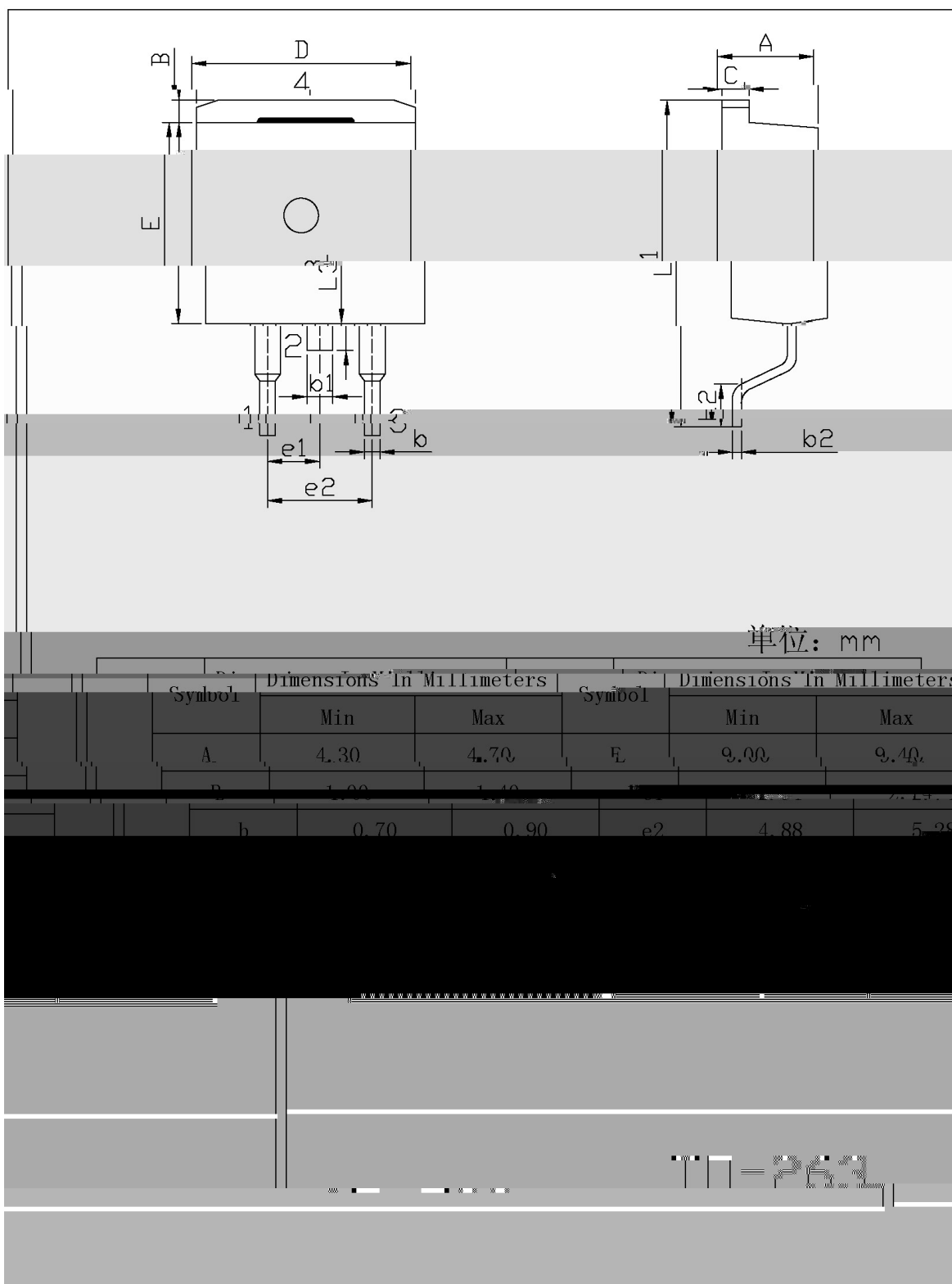
IR - VR



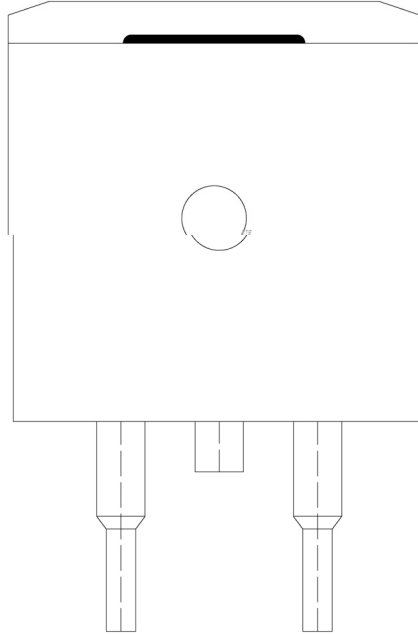
CJ - VR



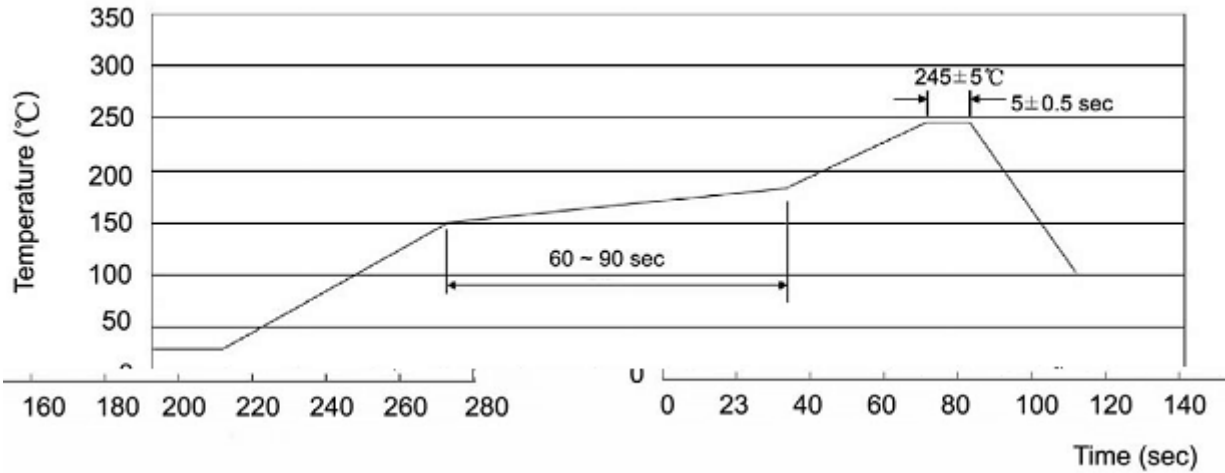
/ Package Dimensions



/ Marking Instructions



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Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 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 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱	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		