LV10T100B

Rev.F May.-2016

蓝箭电子
BLUE ROCKET ELECTRONICS
DATA SHEET

/ Descriptions

TO-263

Schottky Diode in a TO-263 Plastic Package.

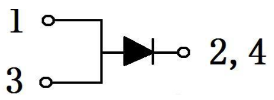
/ Features

High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

/ Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

/ 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 Blocking Voltage	V_{RM} V_{RSM} V_{DC}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
Average forward rectified current	$I_{F(AV)}$	1×10	A
Non Repetitive Peak Surge Current	I_{FSM}	200	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.8	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 +150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	I_R=1mA(Ta=25)	100			V
Forward Voltage	V_F	I_F =2A(Ta=25)		0.41	0.45	V
		I_F =10A(Ta=25)		0.58	0.65	V
		I_F =2A(Ta=125)		0.31	0.40	V
		I_F =10A(Ta=125)		0.55	0.65	V
Instantaneous Reverse Current	I_R Note 1	V_R=100V(Ta=25)			150	μA
		V_R=100V(Ta=125)			25	mA

/Notes

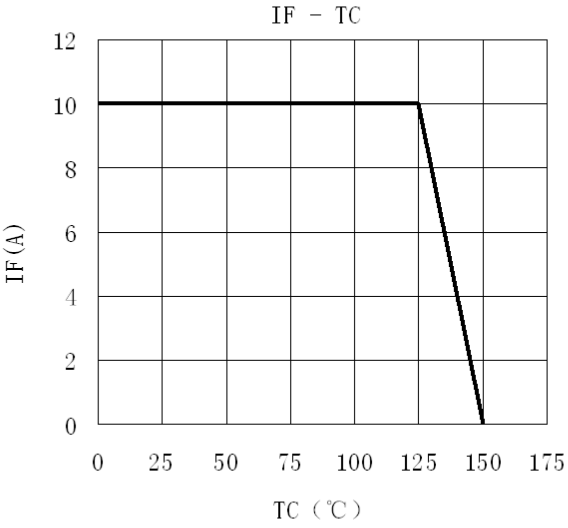
1.

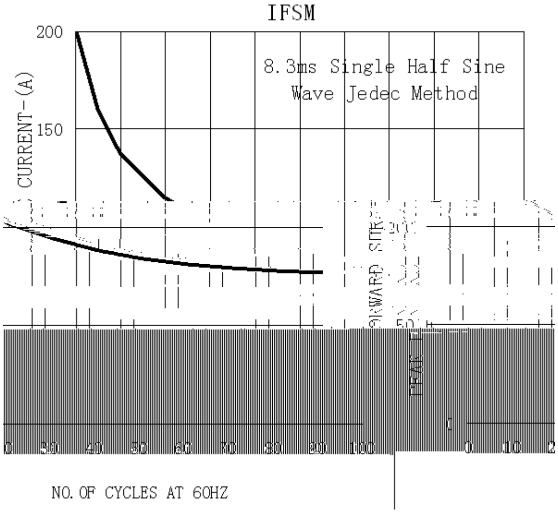
Short duration pulse test used to minimize self-heating effect.

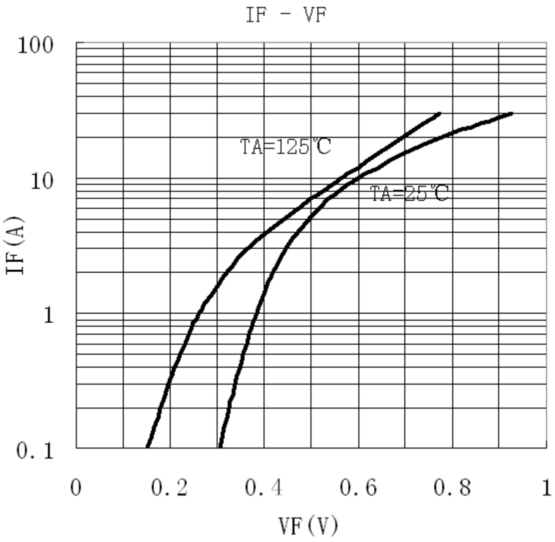
2.

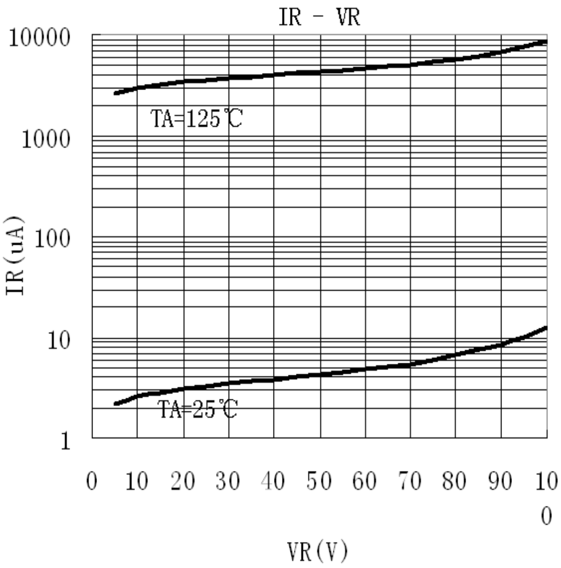
Unless otherwise noted, values for the parameters of a single chip

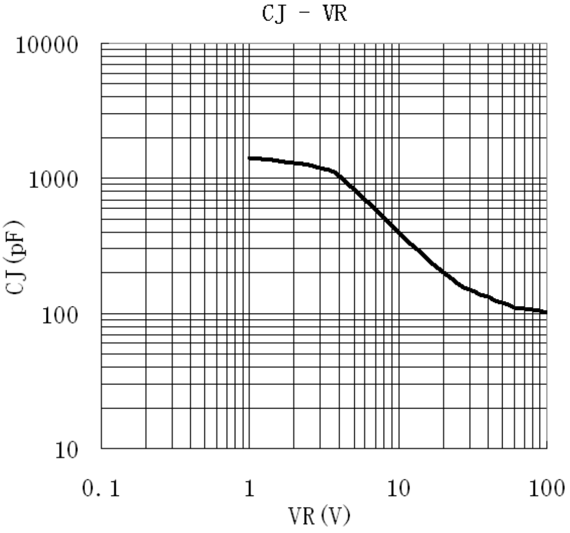
/ Electrical Characteristic Curve



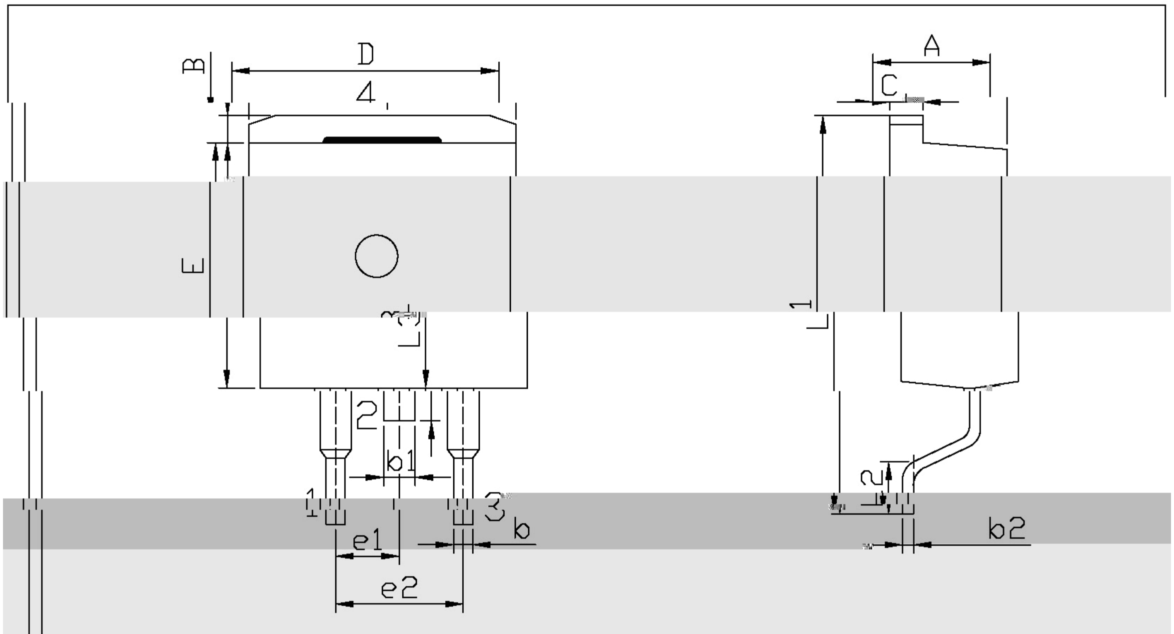








/ Package Dimensions



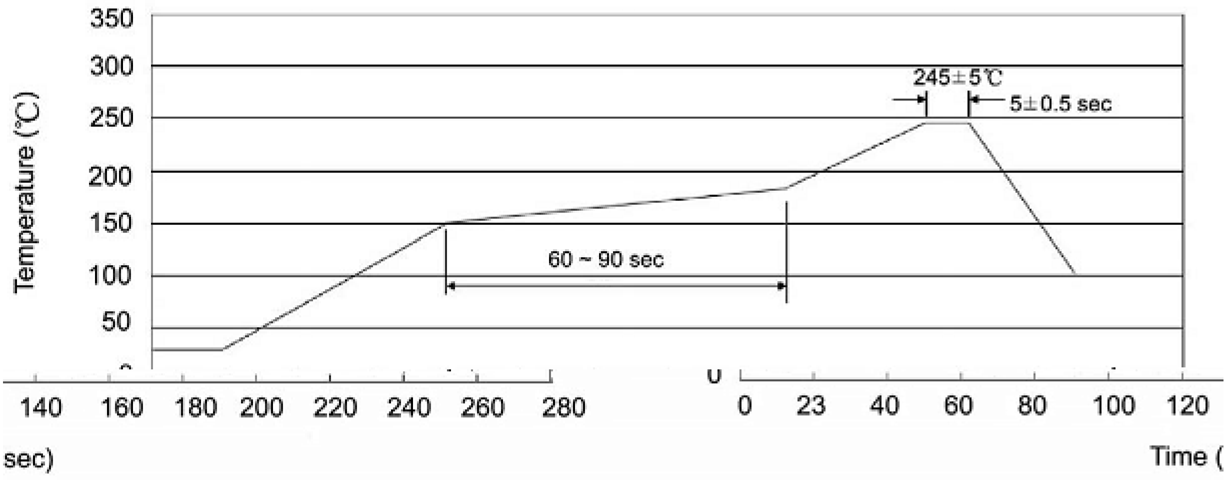
单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40

[redacted]

TO-263

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



	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	只 盒	盒 箱	只 箱	套管	盒	箱

/ Notices