

/ Descriptions

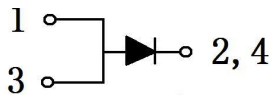
Schottky Diode in a TO-263 Plastic Package.

/ 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_{JC}	2.8	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 +150	

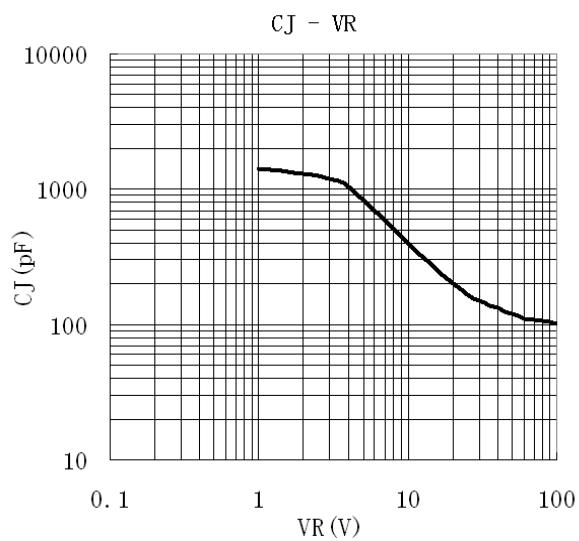
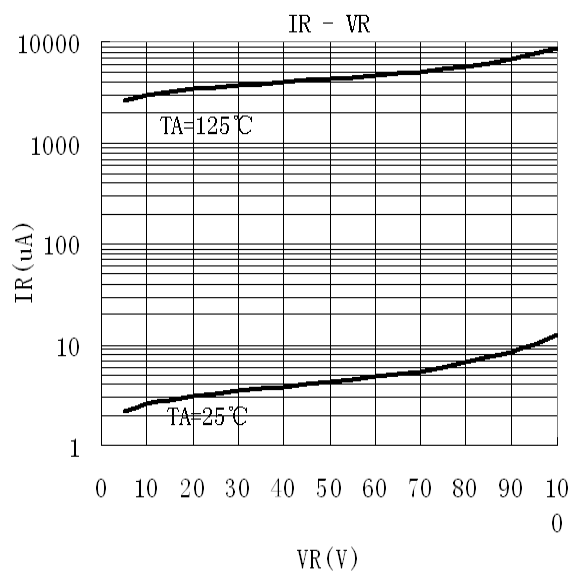
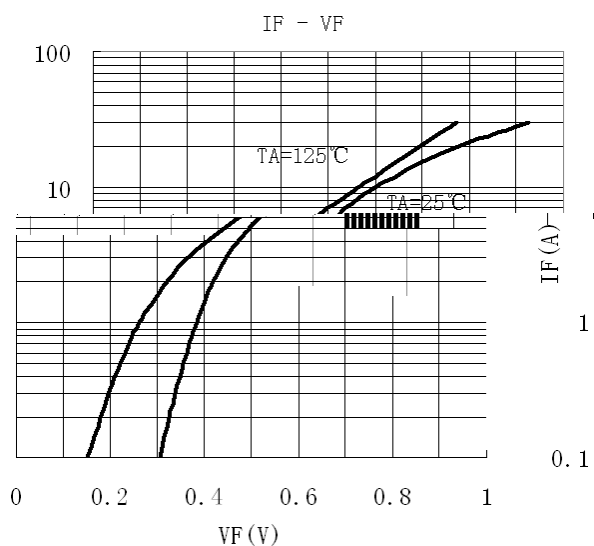
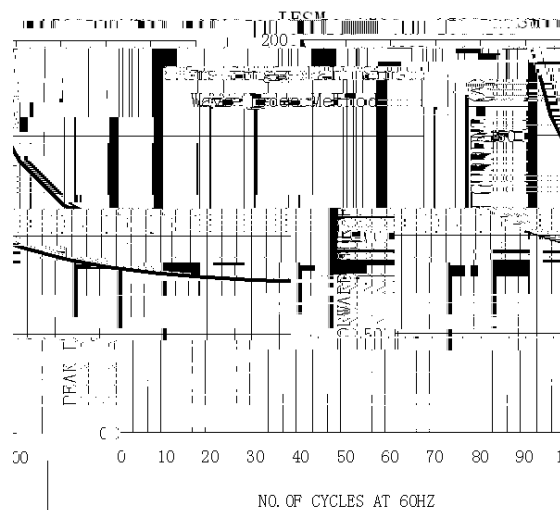
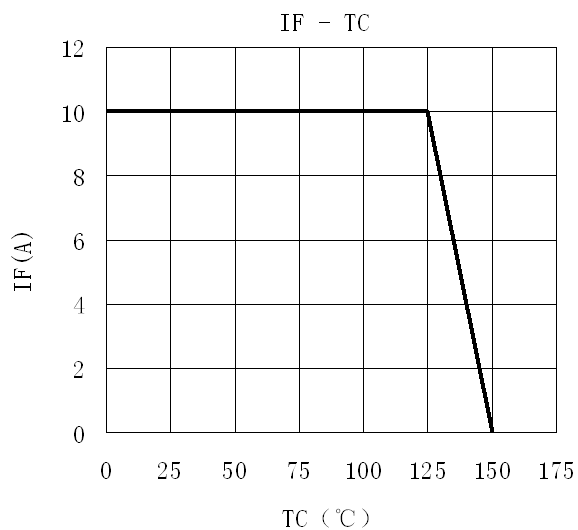
/ Electrical Characteristics(Ta=25)

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	A
		$V_R=100V(Ta=125)$			25	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

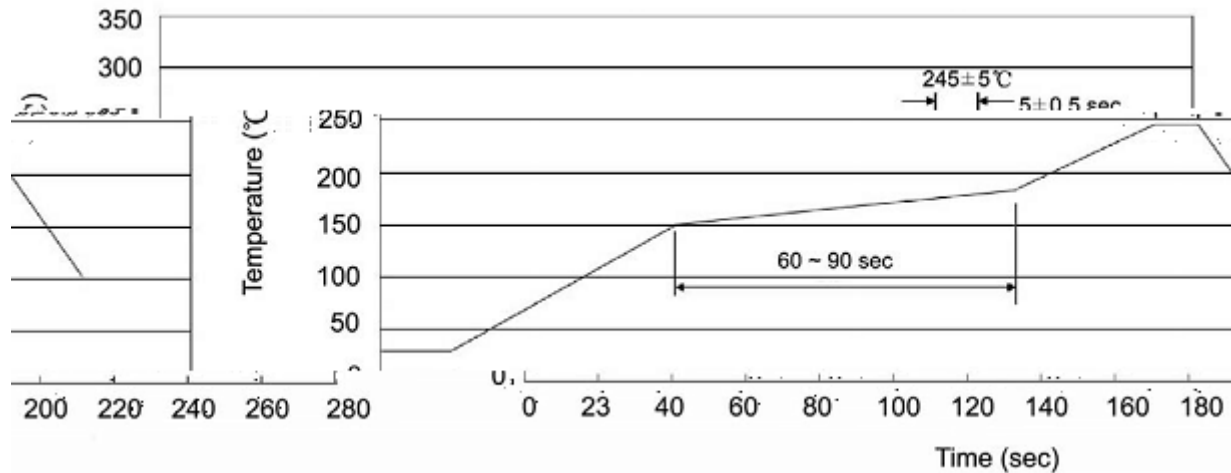


/ Package Dimensions



LV10T100B

() / 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)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-263	800	1	800	5	4,000	13 ×24	360×360×50	385×257×392

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices