

/ Descriptions

Schottky Barrier Diode in a TO-277 Plastic Package.

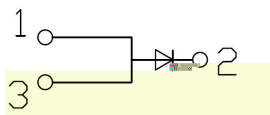
/ Features

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

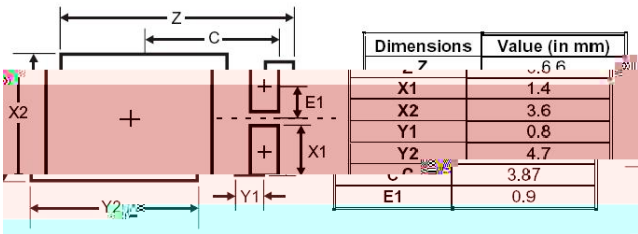
/ Applications

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 Cathode PIN 3 Anode

Suggested Pad layout

/ 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}	50	V
RMS Voltage	V_{RMS}	35	V
Average Rectified Forward Current	$I_{F(AV)}$	1×15	A
Non Repetitive Peak Surge Current	I_{FSM}	280	A
Thermal Resistance Junction to Case Note 1	R_{JC}	73	/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25)$	50			V
Forward Voltage	V_F	$I_F=3A(Ta=25)$		0.33	0.42	V
		$I_F=3A(Ta=125)$		0.22	0.28	V
		$I_F=15A(Ta=25)$		0.45	0.47	V
		$I_F=15A(Ta=125)$		0.40	0.45	V
Instantaneous Reverse Current	I_R Note 2	$V_R=50V(Ta=25)$		80	150	A
		$V_R=50V(Ta=100)$			30	mA
		$V_R=50V(Ta=125)$			50	mA

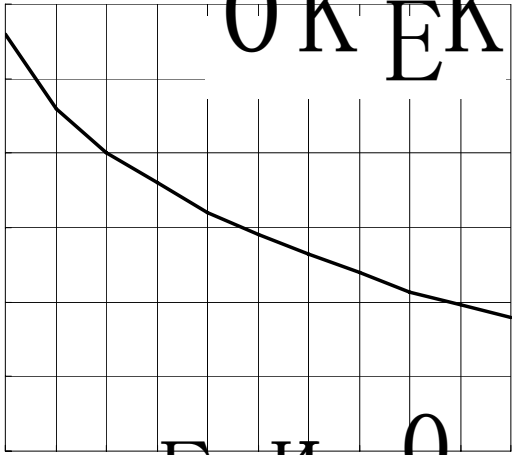
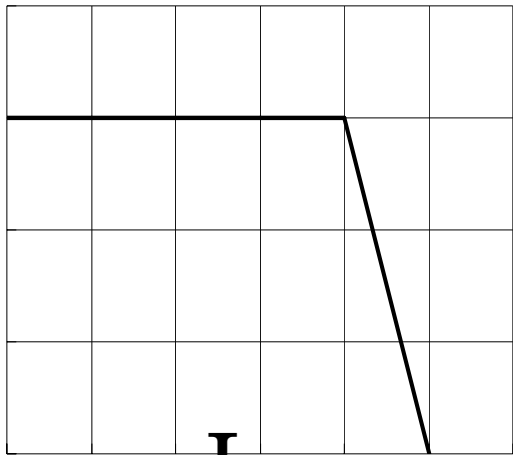
Notes

FR-4 PCB, 2oz. Copper, minimum recommended pad layout per.

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

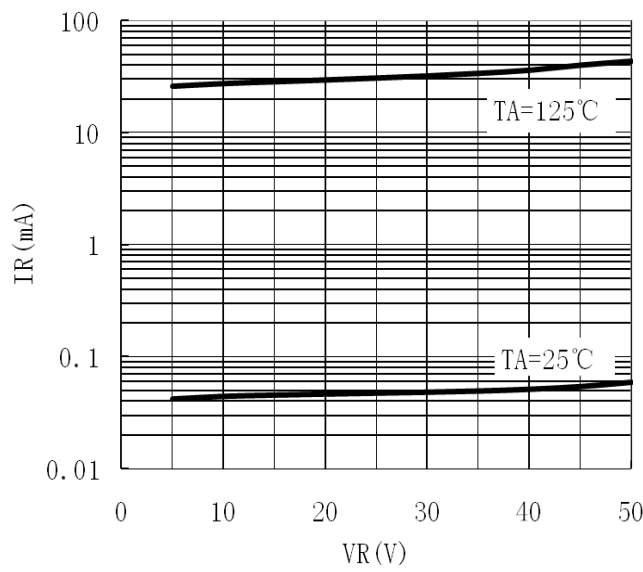
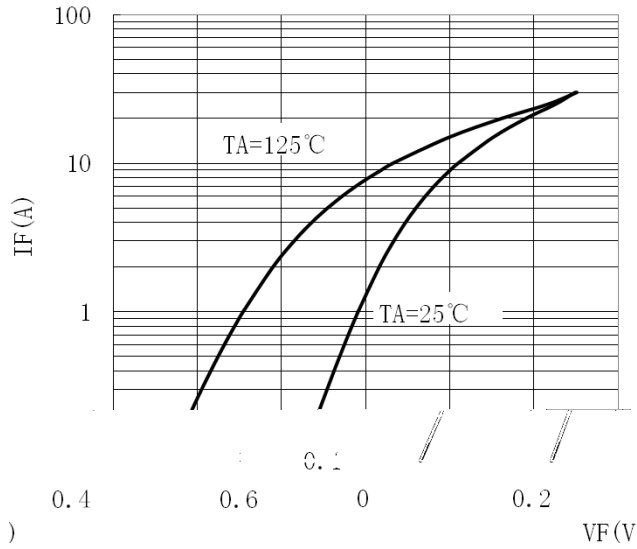
Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

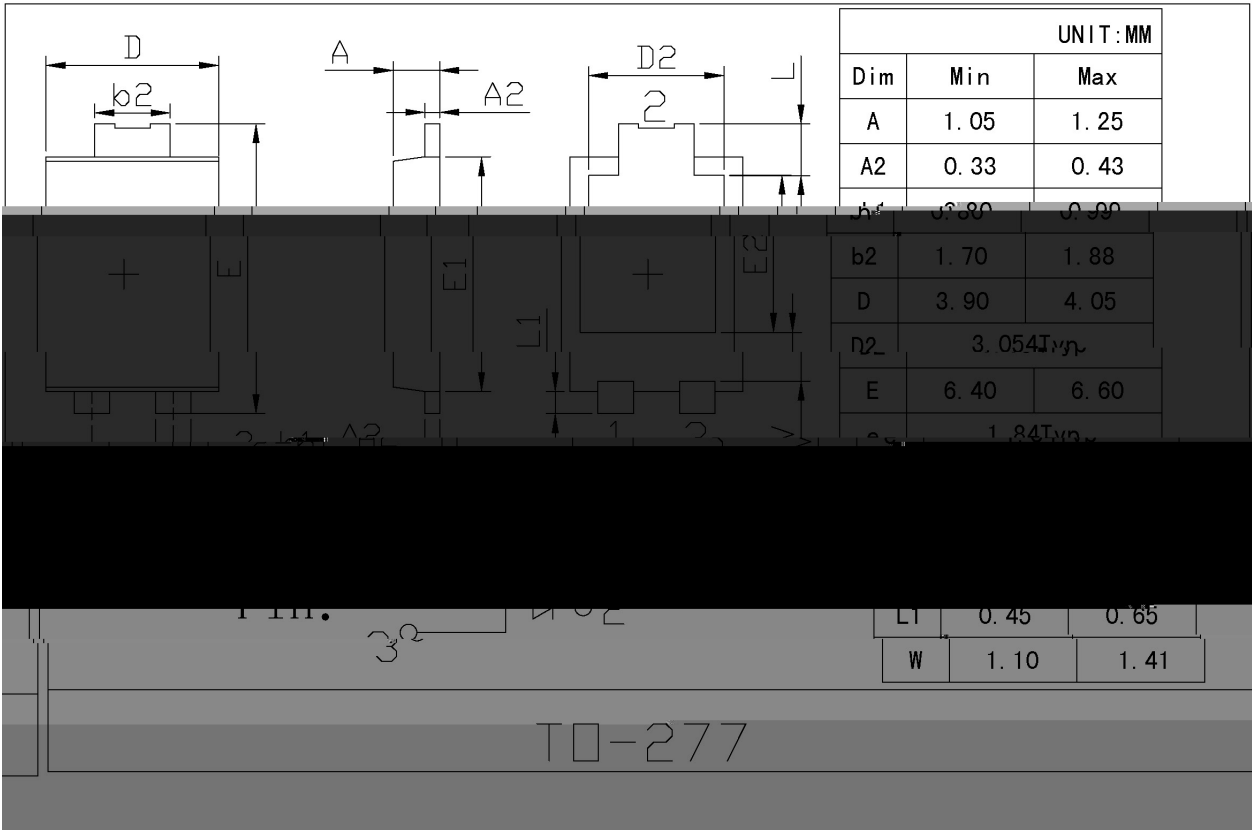


IF - VF

IR - VR



/ Package Dimensions



/ Marking Instructions



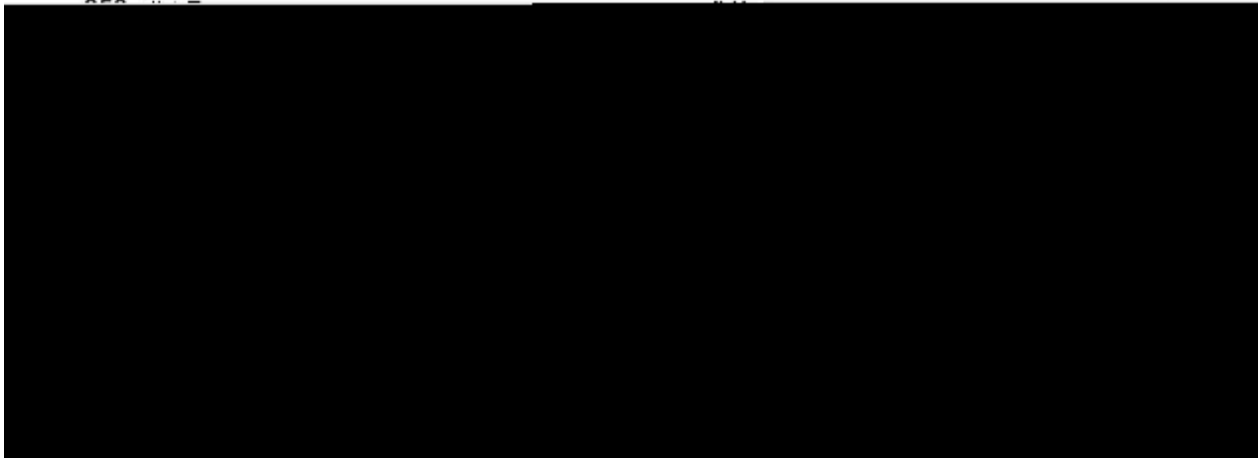
Note:

Product Type.

****:

Lot No. Code, code change with Lot No.

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



Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , 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-277	5,000	3	15,000	6	90,000	13 ×12	360×360×50	380×335×366

/ Notices