

/ Descriptions

TO-277
TO-277 Plastic package Schottky diode.

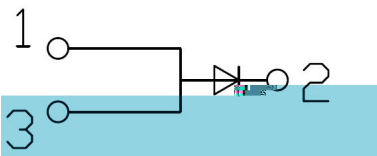
/ Features

$V_F(\text{typ})=0.35\text{V}$
High Forward Surge Capability, Ultra Low Forward Voltage Drop $V_F(\text{typ})=0.36\text{V}$, Excellent High Temperature Stability. HF Product.

/ Applications

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

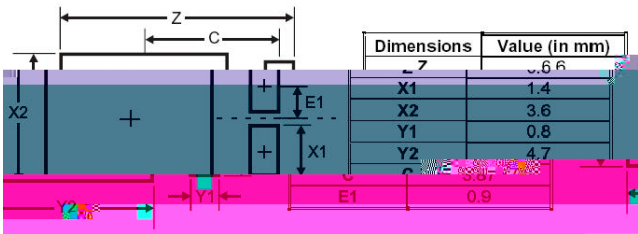
/ Equivalent Circuit



/ 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 Reverse Voltage	V_{RRM} V_{RWM} V_{RM}	50	V
RMS voltage	$V_{R(RMS)}$	45	V
Average Output Rectified Current	I_O	15	A
Non Repetitive Peak Surge Current	I_{FSM}	290	A
Junction Temperature Range	$T_{j\ MAX}$	150	
Storage Temperature Range	T_{stg}	-55~150	
Thermal Resistance Junction to Case	$R_{\theta JC}$ (Note 1)	73	/W

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.5mA$	50			V
Forward Voltage	V_F	$I_F=10A$ $T_J=25^{\circ}C$		0.37	0.44	V
		$I_F=10A$ $T_J=125^{\circ}C$		0.29		V
		$I_F=15A$ $T_J=25^{\circ}C$		0.41	0.47	V
		$I_F=15A$ $T_J=125^{\circ}C$		0.35		V
Instantaneous Reverse Current	I_R (Note 2)	$V_R=50V$ $T_J=25^{\circ}C$		168	500	μA
		$V_R=50V$ $T_J=100^{\circ}C$			50	mA
		$V_R=50V$ $T_J=125^{\circ}C$			105	mA

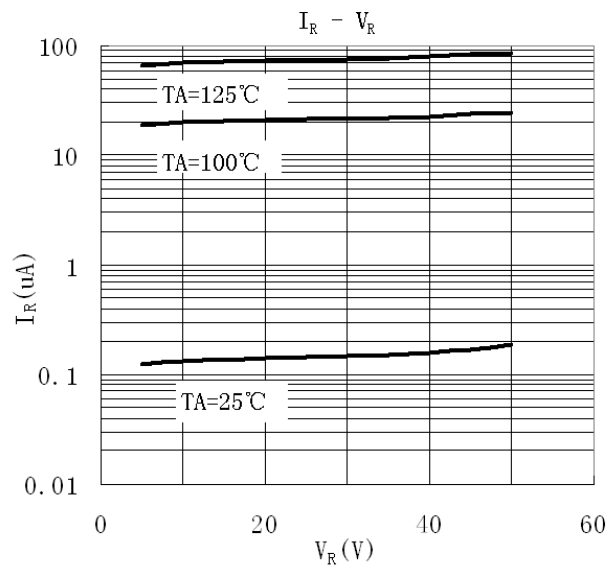
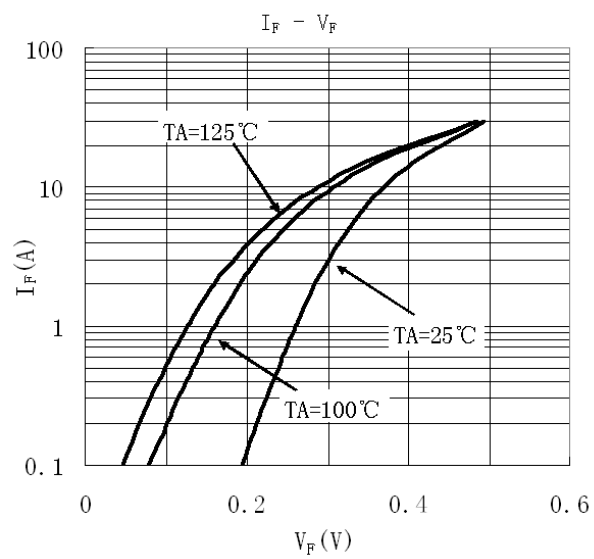
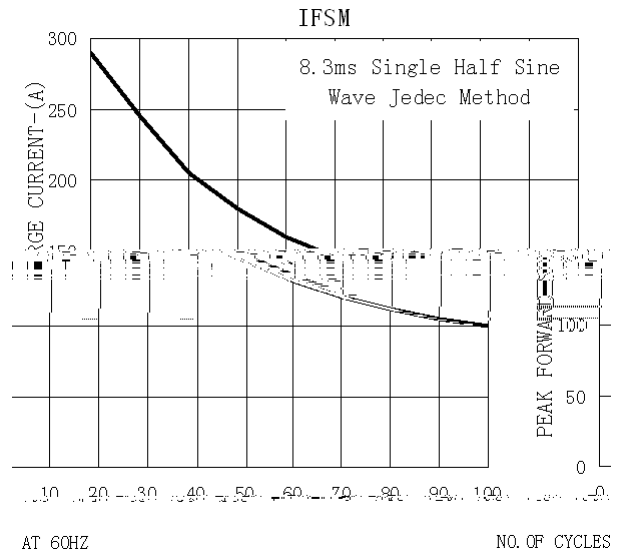
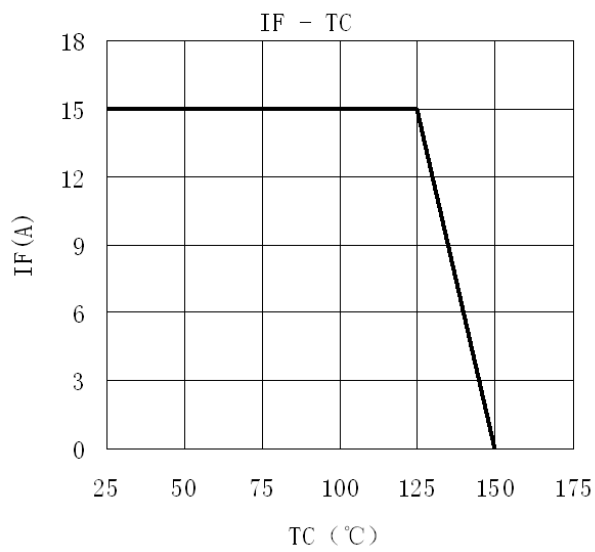
/Notes:

1. FR-4 PCB 2 layout per.
2. effect.

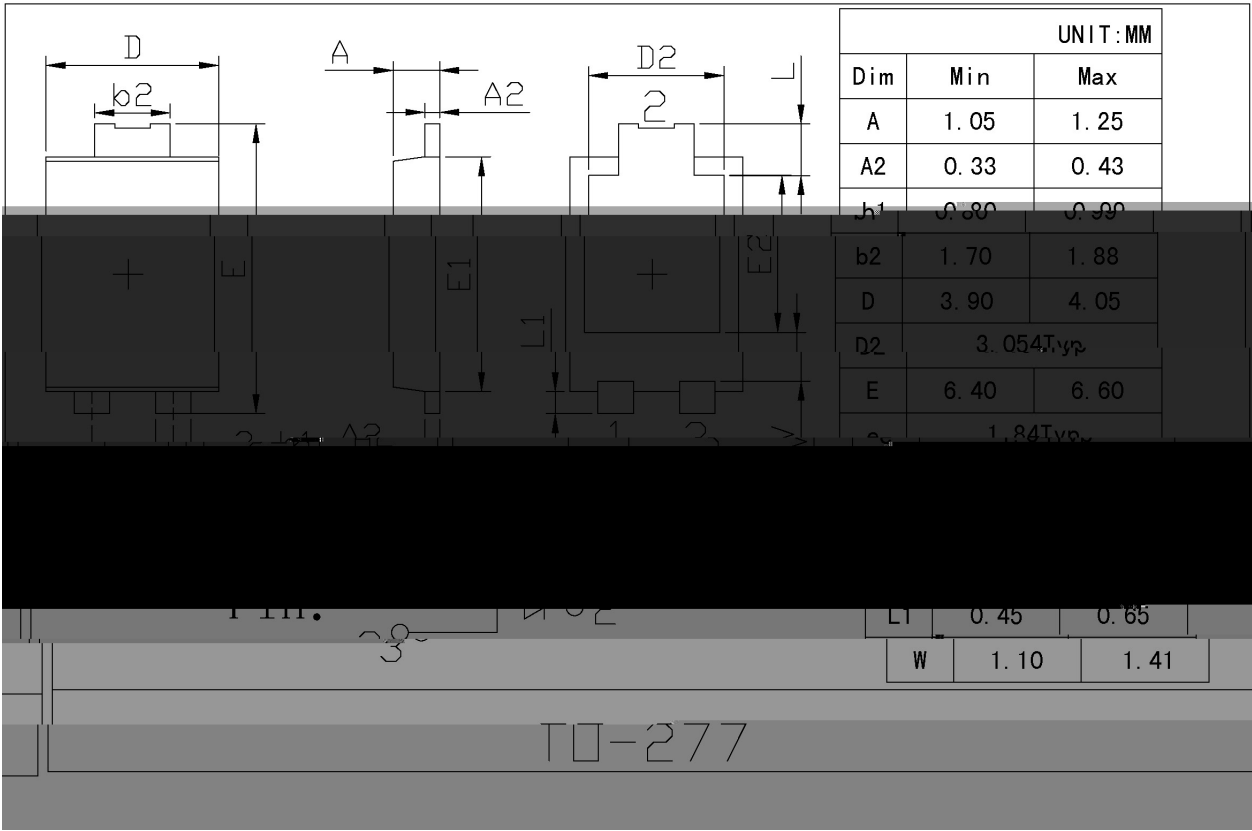
/FR-4 PCB, 2oz. Copper, minimum recommended pad

/Short duration pulse test used to minimize self-heating

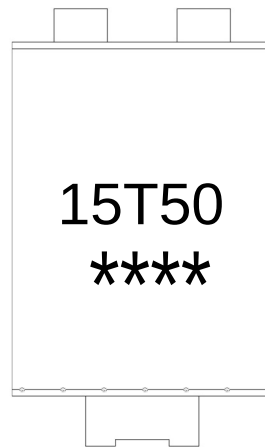
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



15T50

Note:

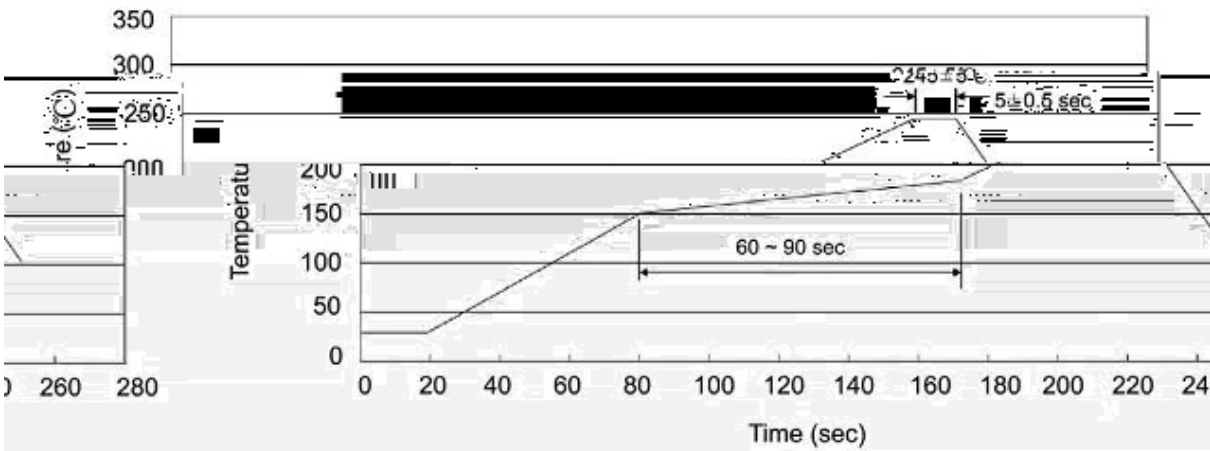
15T50

Product Type Code.

****:

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