

LV10100E

Rev.G Oct.-2018

/ Descriptions

TO-277

TO-277 Plastic package Schottky diode .

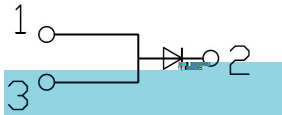
/ Features

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

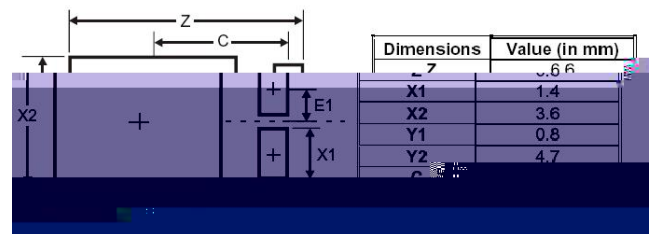
/ Applications

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 Peak Reverse Voltage	V_{RRM} V_{RWM} V_{RM}	100	V
RMS Reverse voltage	$V_{R(RMS)}$	78	V
Average Rectified Output Current	I_O	10	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	150	A
Repetitive peak avalanche power	P_{ARM}	20000	W
Junction Temperature Range	T_{jMAX}	150	
Storage Temperature Range	T_{stg}	-55~150	
Typical Thermal Resistance	R_{JA} (Note 1)	76	/W

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.3mA$	100			V
Forward voltage	V_F	$I_F=2A$ $T_J=25$		0.43		V
		$I_F=2A$ $T_J=125$		0.33		V
		$I_F=10A$ $T_J=25$		0.62	0.72	V
		$I_F=10A$ $T_J=125$		0.57	0.65	V
Instantaneous Reverse Current	I_R (Note 2)	$V_R=100V$ $T_J=25$		15	100	uA
		$V_R=100V$ $T_J=125$		10	25	mA

/Notes:

1. FR-4 PCB 2

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

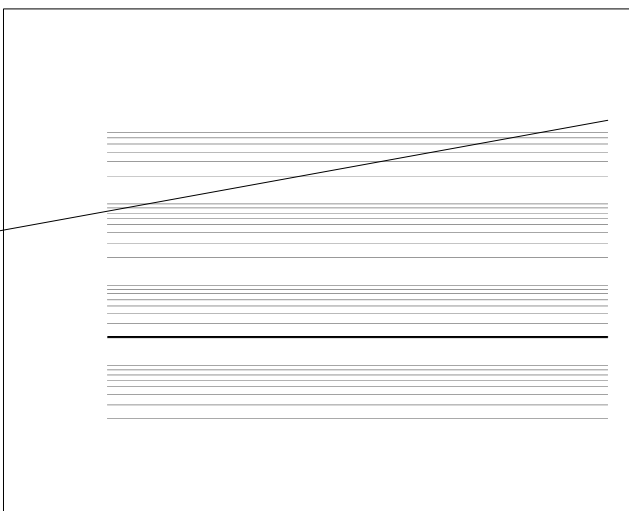
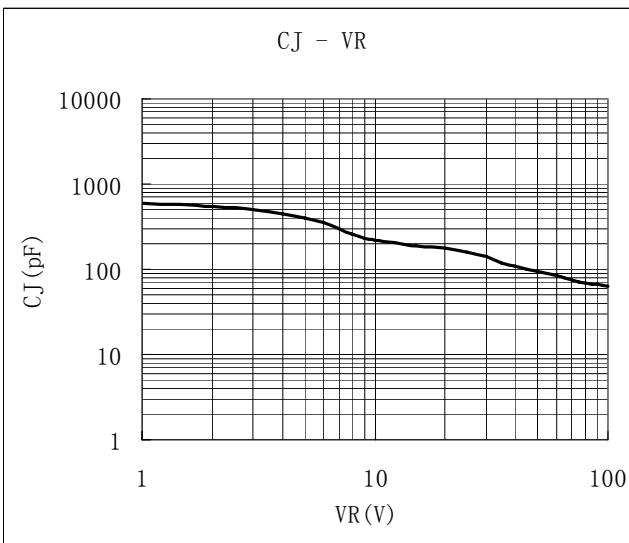
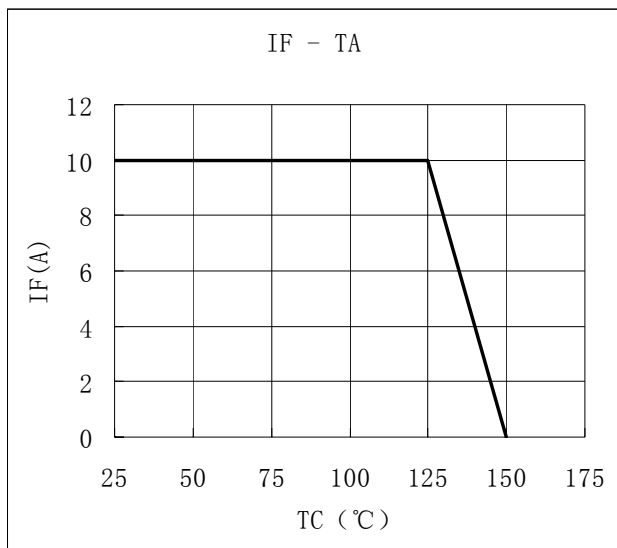
layout per.

2.

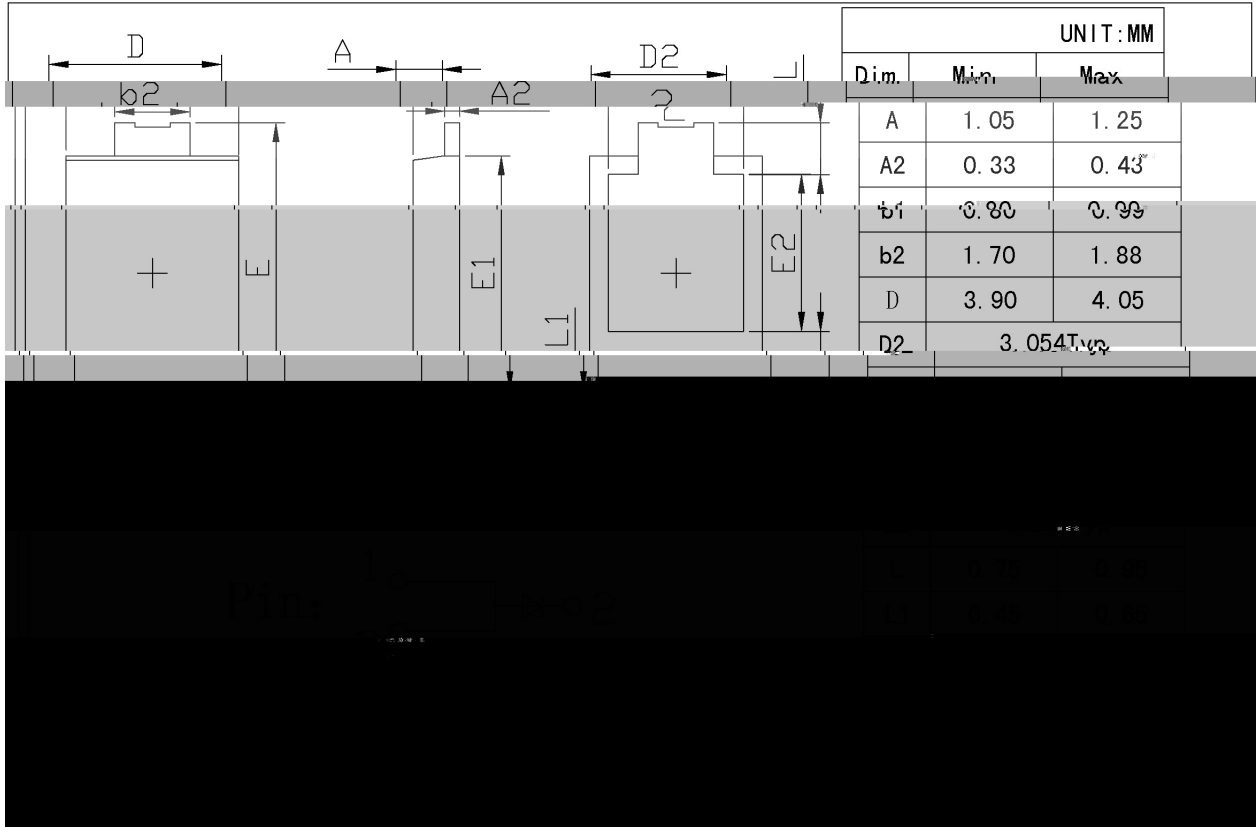
/Short duration pulse test used to minimize self-heating

effect.

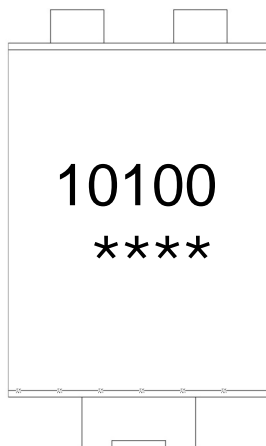
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



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Note:

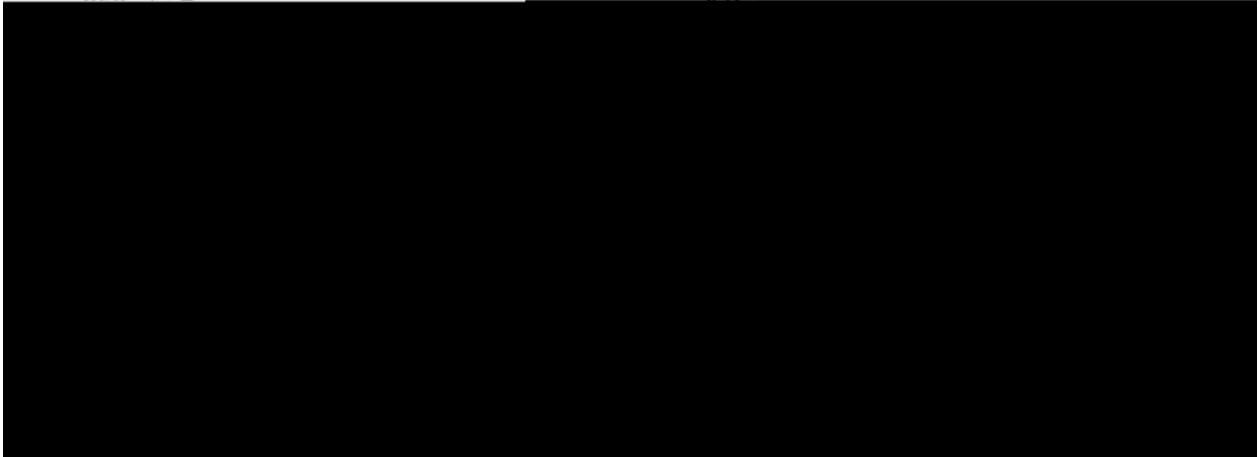
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Product Type.

****:

Lot No. Code, code change with Lot No.

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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