

/ Descriptions

TO-277

TO-277 Plastic package Schottky diode .

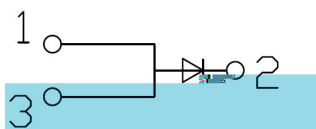
/ Features

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

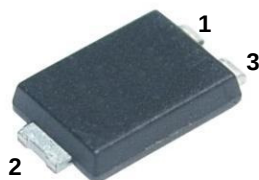
/ Applications

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

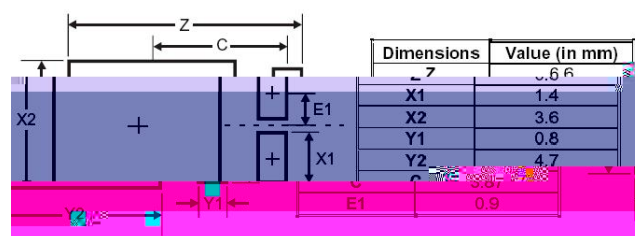
/ Equivalent Circuit



/ 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}	200	V
RMS Reverse voltage	$V_{R(RMS)}$	180	V
Average Rectified Output Current	I_O	4	A
Non Repetitive Current	I_{FM}	8	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	100	A
Junction Temperature Range	$T_{J\ MAX}$	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C
Typical Thermal Resistance	$R_{\theta JA}$ Note 1	80	°C/W

/ Electrical Characteristics(Ta=25)

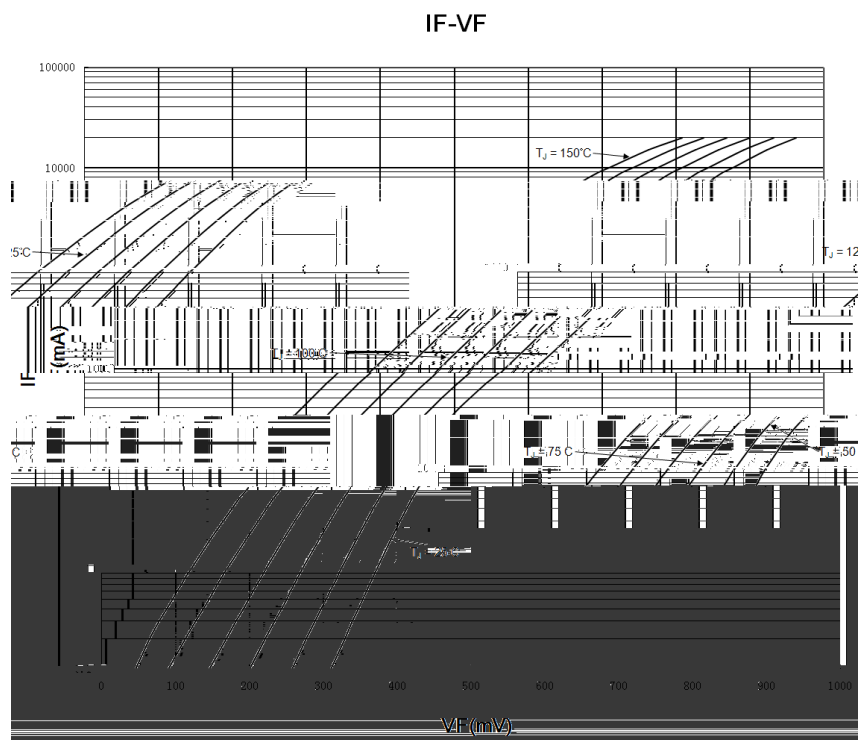
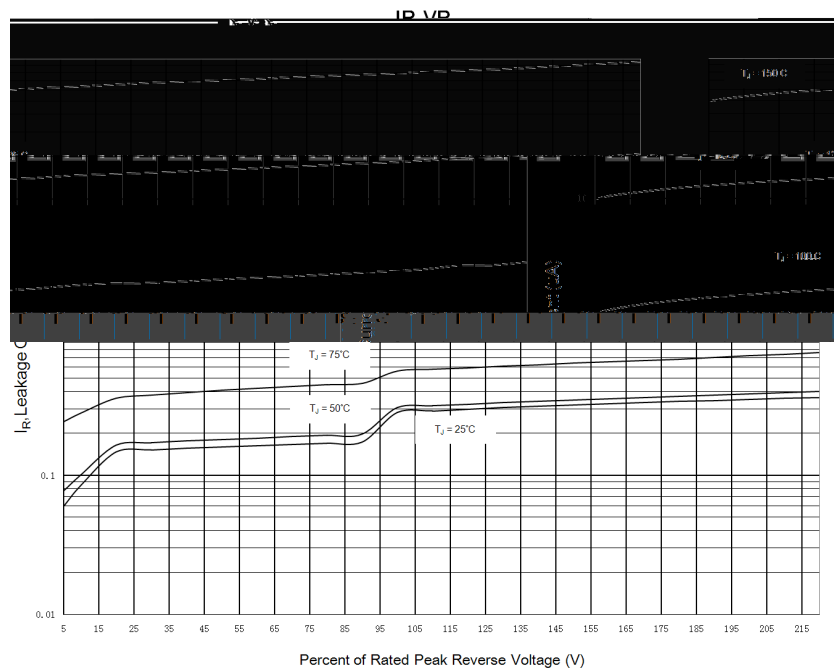
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.3mA$	200			V
Forward voltage	V_F	$I_F=3A$ $T_J=25^{\circ}C$ $/T_J=125^{\circ}C$		780/625	820	mV
		$I_F=4A$ $T_J=25^{\circ}C$ $/T_J=125^{\circ}C$		795/649	840	mV
		$I_F=8A$ $T_J=25^{\circ}C$ $/T_J=125^{\circ}C$		851/715	890	mV
		$I_F=10A$ $T_J=25^{\circ}C$ $/T_J=125^{\circ}C$		876/741		mV
Instantaneous Reverse Current	I_R Note 2	$V_R=200V$ $T_J=25^{\circ}C$		0.01	1	uA
		$V_R=200V$ $T_J=125^{\circ}C$		0.02	2	mA
		$V_R=200V$ $T_J=150^{\circ}C$		0.1	10	mA

Notes

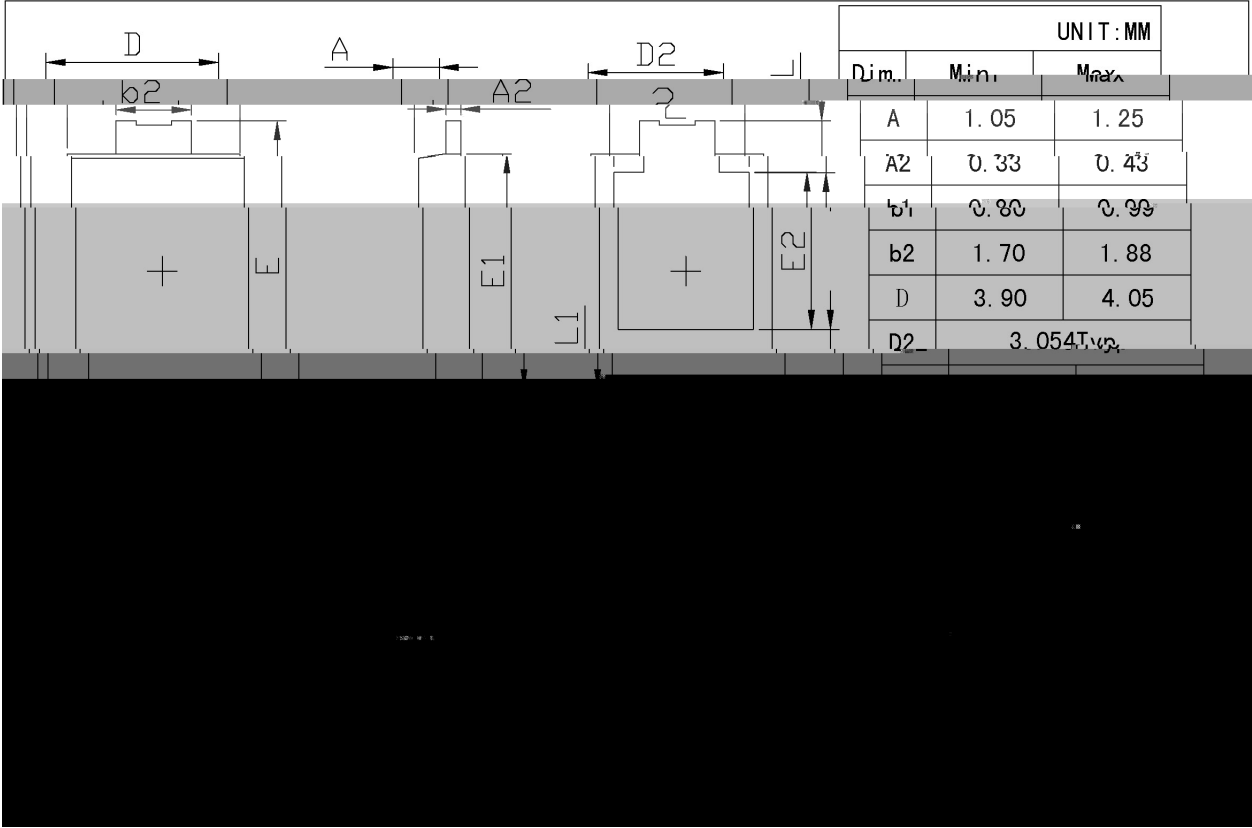
/FR-4 PCB, 2oz. Copper, minimum recommended pad layout per.

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

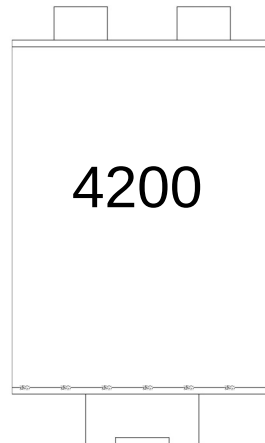
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



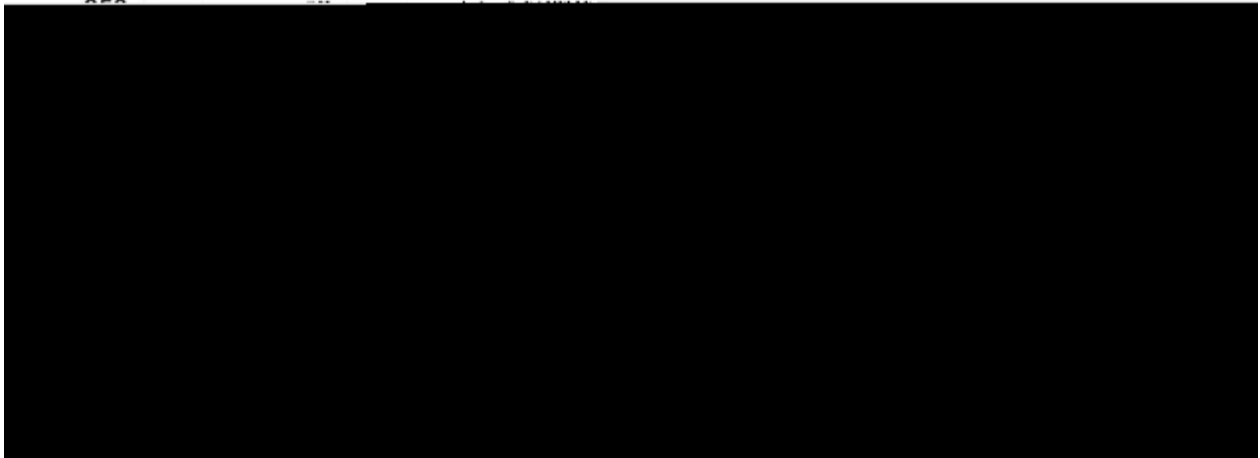
Note:

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	Units					Dimension		(unit mm ³)