/ Descriptions

TO-277

Schottky diode in a TO-277 Plastic Package.

/ Features

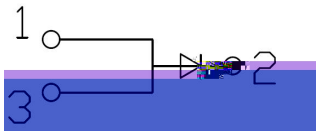
V_F(typ)=0.26V

High Forward Surge Capability, Ultra Low Forward Voltage Drop V_F(typ)=0.26V, Excellent High Temperature Stability. HF Product.

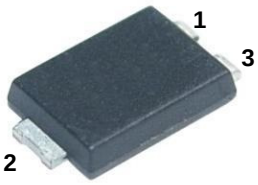
/ Applications

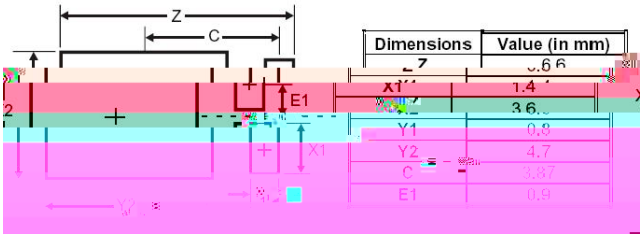
For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

/ 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}	45	V
RMS Reverse voltage	$V_{R(RMS)}$	42	V
Average Rectified Output Current	I_O	10	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	275	A
Repetitive peak avalanche power	P_{ARM}	30000	W
Junction Temperature Range	T_j $V_R \leq 80\%V_{RRM}$	150	
Storage Temperature Range	T_{stg}	-55 150	
Typical Thermal Resistance	$R_{\theta JA}$ Note 1	73	/W

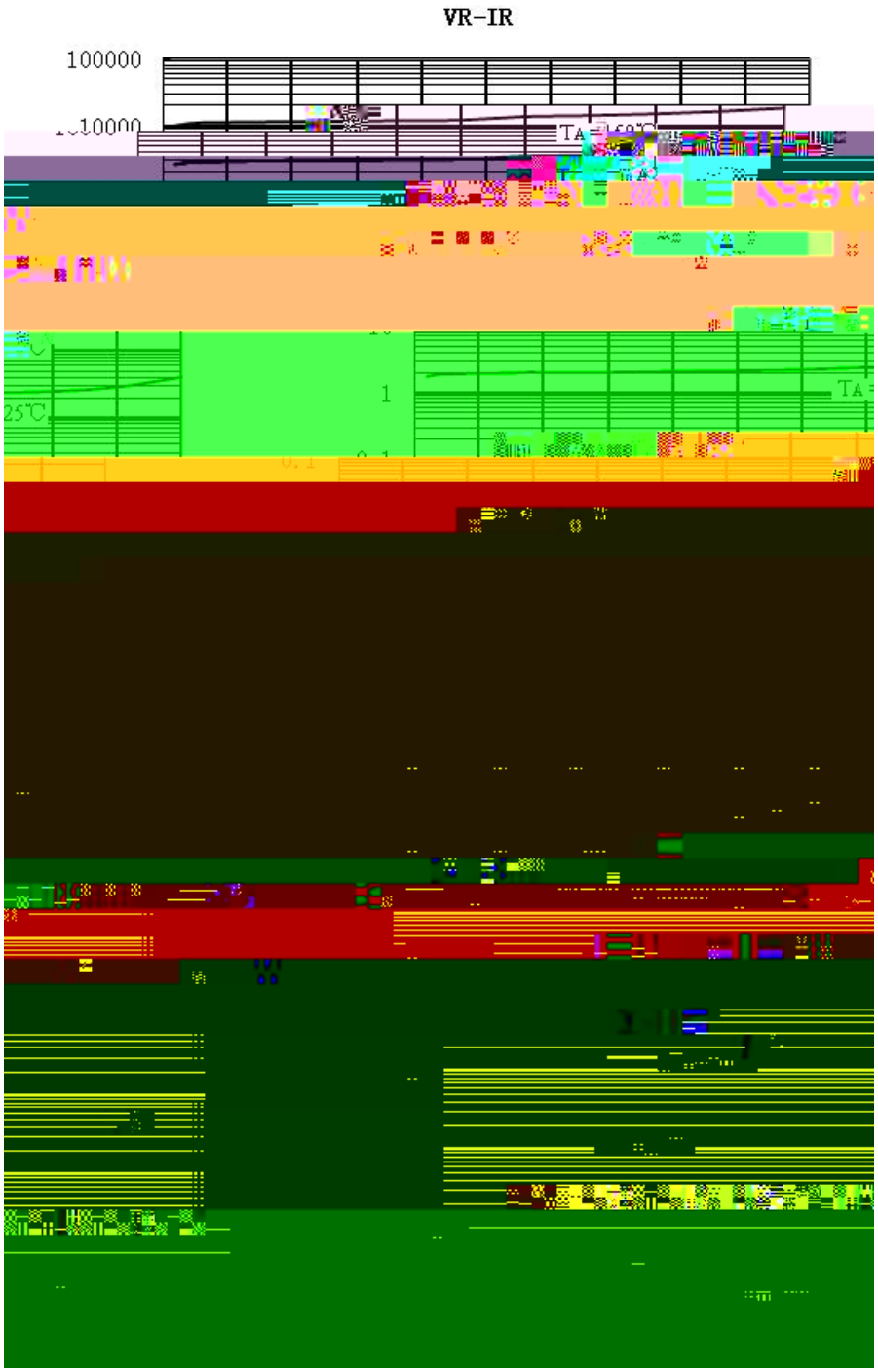
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	I_R=0.3mA	45			V
Forward voltage	V_F	I_F=2A T_J=25		0.39	0.43	V
		I_F=2A T_J=125		0.26		V
		I_F=10A T_J=25		0.49	0.52	V
		I_F=10A T_J=125		0.41	0.44	V
Instantaneous Reverse Current	I_R Note 2	V_R=45V T_J=25		3	15	uA
		V_R=45V T_J=100			5	mA
		V_R=45V T_J=125			10	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

