FEATURES

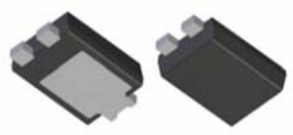
- High current capability, low forward voltage
- Excellent high temperature stability
- Low power loss, and high ef ficiency
- High Forward Surge Capability
- Patented package technology

APPLICATIONS

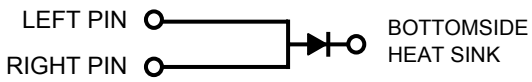
- Switching mode power supply applications
- Portable equipment battery applications
- High frequency rectification
- DC/DC Converter
- Designed as bypass diodes for solar panels

SYMBOL

Package: TO-277B (SMD)



Top View Bottom View



特征：超薄封装，体积小，超低压降等特点

■ABSOLUTE MAXIMUM RATINGS (T_A=25°C,unless otherwise specified)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive peak reverse voltage	V_{RRM}	50	V
Maximum DC blocking voltage	V_{RM}	50	
Averageforward current	$I_{F(AV)}$	15	A
Surge non repetitive forward current (8.3ms single half sine- wave)	I_{FSM}	295	
Single pulse davalanche energy (I_{AS}=12A, L=10mH)	E_{AS}	530	mJ
Junction Temperature	T_J	150	℃
Storage Temperature	Tstg	-55~+150	
Thermal Resistance, Junction-to-Ambiene	R_{QJA} (1)	73	℃/W
	R_{QJA} (2)	31	

Note: 1. FR-4 PCB, 2oz. Copper.

2. Polymide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm ×14.4mm. Anode pad dimensions 5.6mm ×14.4mm.

■Electrical Characteristics

Characterisrtic	Symbol	Test Condition		Rating			UNIT
				Min	Typ	Max	
Fo rward voltagedrop	V_F	I_F=3A		--	0.33	0.36	V
		I_F=10A		--	0.41	0.46	
		I_F=15A	T_J=25℃	--	0.43	0.47	
			T_J=100℃	--	0.40	0.41	
Reverse leakagecurrent	I_R	V_R=Max.V_{RRM}	T_J=25℃	--	0.076	0.30	mA
			T_J=125℃	--	16	60	

Fig-1. Typical Forward Characteristics

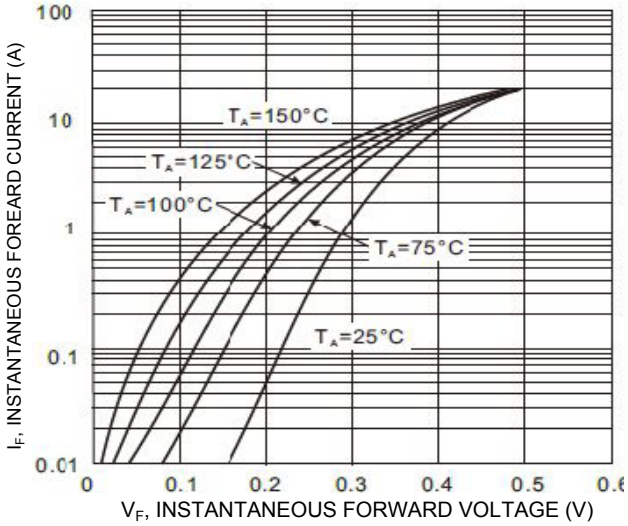


Fig-2. Typical Reverse Characteristics

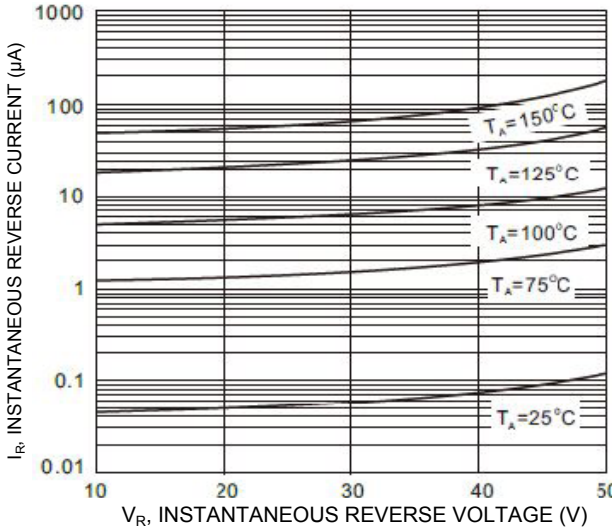


Fig-3. Forward Current Derating Curve

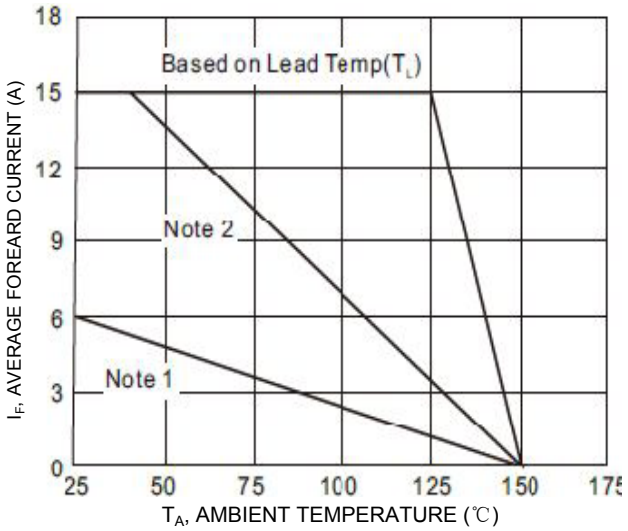


Fig-4. Operating Temperature Derating Curve

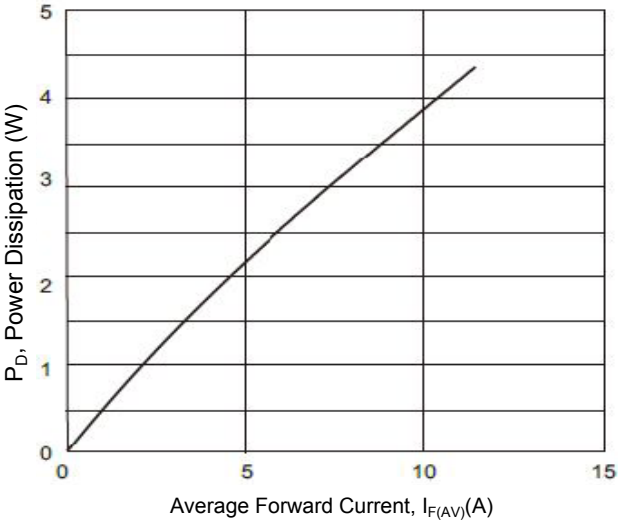
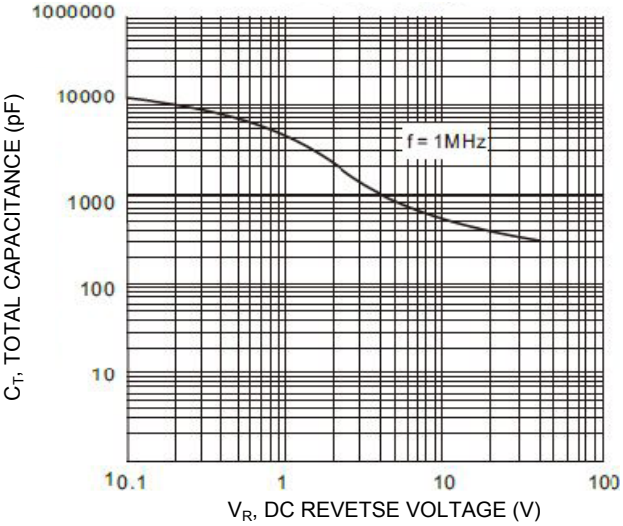
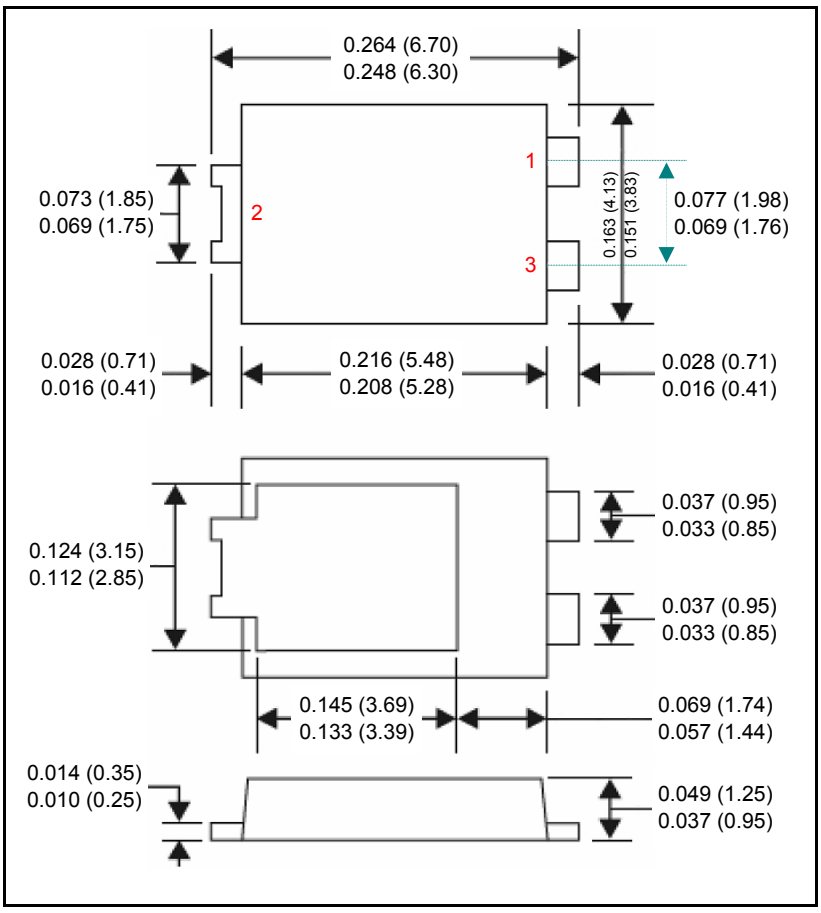


Fig-5. Total Capacitance VS. Reverse Voltage

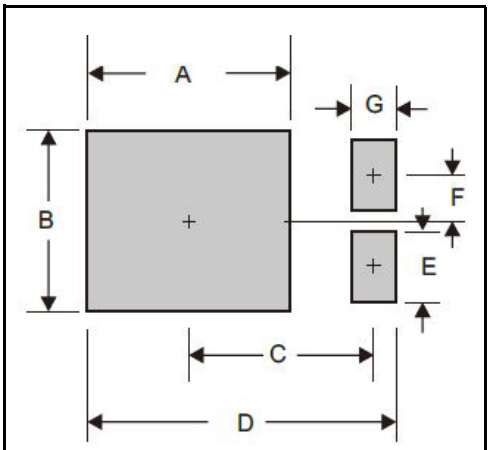


TO-277B Package Dimensions inch (millimeters)

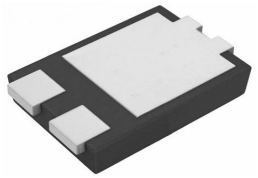


SMD表面贴装
TO-277
TO-277B
QFN5×6
POWERDI5

Suggested Pad Layout
PCB焊接布局建议参考



A	B	C	D	E	F	G
0.185(4.70)	0.142(3.60)	0.152(3.87)	0.260(6.60)	0.055(1.40)	0.035(0.90)	0.031(0.80)



TO-277B
载带卷盘包装：Tape & Reel
每卷数量：5000只（5Kpcs/Reel）
每盒数量：10000只（10Kpcs/BOX）

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