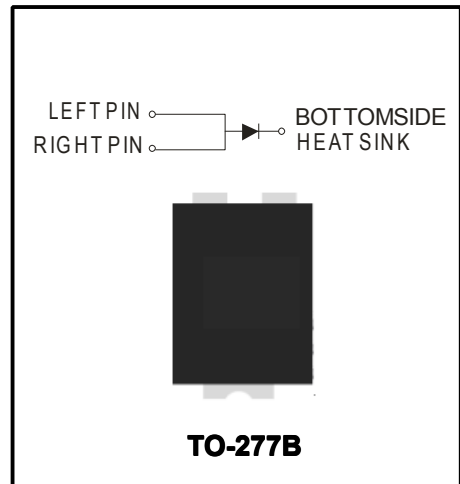


Features

- High current capability, low forward voltage
- Excellent high temperature stability
- Low power loss, and high efficiency
- High Forward Surge Capability
- RoHS compliant, and Halogen free

Applications

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



Absolute Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

Symbol	Parameter	Value	Units
V_{RRM}	Repetitive peak reverse voltage	45	V
$I_{F(AV)}$	Average forward current	20	A
I_{FSM}	Surge non repetitive forward current (8.3ms single half sine-wave)	280	A
T_J	Junction Temperature	-40~150	°C
T_{stg}	Storage Temperature	-40~150	°C

Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F	$I_F=2A$	-	0.32	0.34	V
		$I_F=8A$	-	0.36	0.39	V
		$I_F=10A$	-	0.42	0.44	V
		$I_F=15A$	-	0.45	0.48	V
		$I_F=20A$	-	0.49	0.52	V
Reverse leakage current	I_R	$V_R = 45V$	-	-	0.3	mA
Junction Capacitance	C_J	$f=1MHz, V_R=4V$	-	600	-	pF
Thermal Resistance Junction to Ambient(note1)	$R_{th(JA)}$		-	31	-	°C/W

Note 1: Polyimide PCB, 2oz. Cathode.cathode pad dimensions 18.8×14.4mm. Anode pad dimensions 5.6×14.4mm

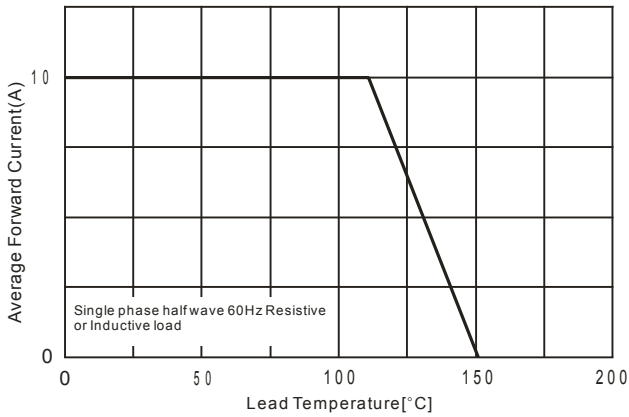


Fig.1 Typical Forward Current Derating Curve

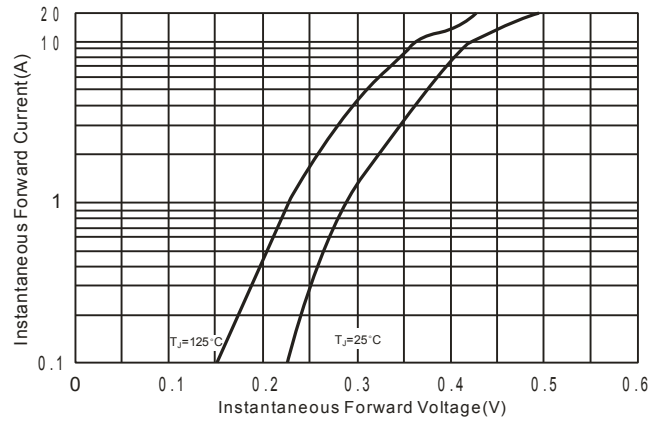


Fig.2 Typical Instantaneous Forward Characteristics

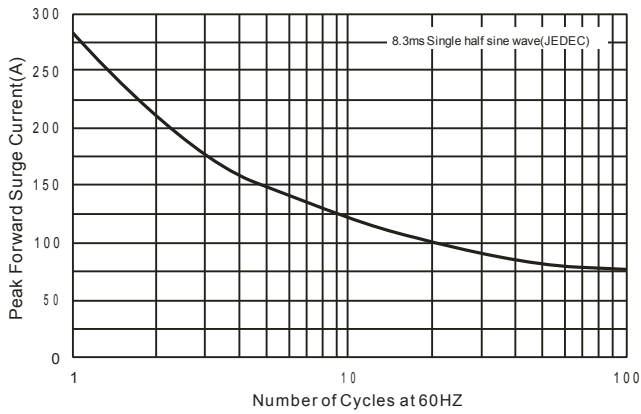


Fig.3 Maximum Non-Repetitive Forward Surge Current

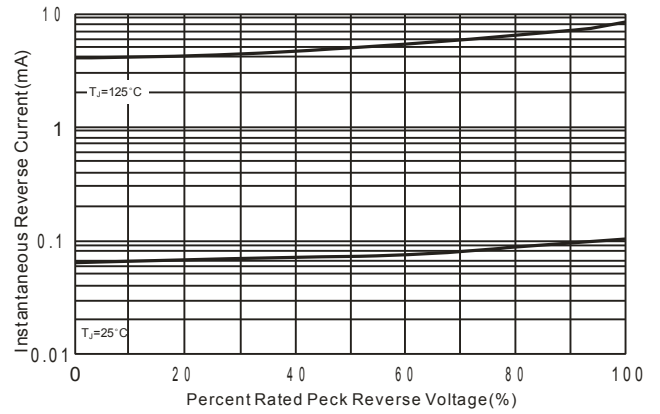
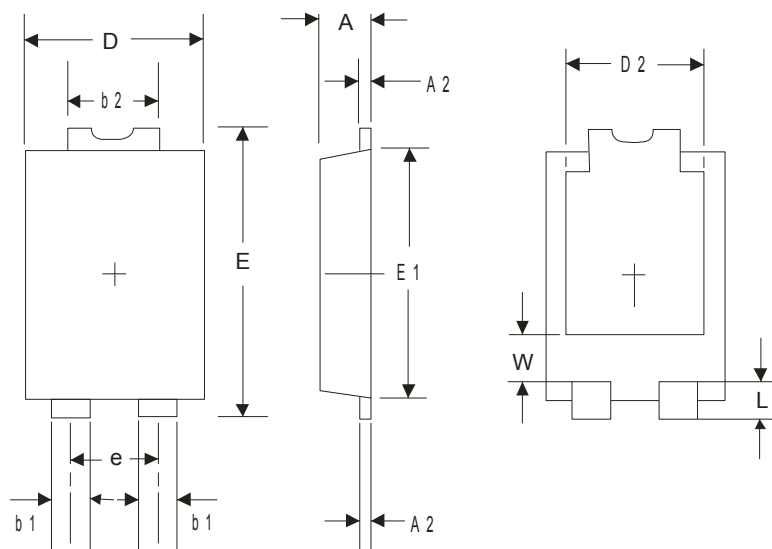


Fig.4 Typical Reverse Characteristics

TO-277B Package Dimension

Unit:mm



符号 Symbol	MIN	MAX
A	1.0	1.2
A 2	0.2	0.4
b 1	0.8	1.1
b 2	2.9	3.3
D	3.9	4.3
D 2	2.9	3.3
E	6.35	6.65
E 1	5.2	5.8
e	1.86(TYP.)	
L	0.85	1.1

NOTE:

1. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
2. Please do not exceed the absolute maximum ratings of the device when circuit designing.
3. Winsemi Microelectronics Co., Ltd reserved the right to make changes in this specification sheet and is subject to change without prior notice.

CONTACT:

Winsemi Microelectronics Co., Ltd.

ADD: Futian District, ShenZhen Tian An Cyber Tech Plaza two East Wing 1002

Post Code : 518040

Tel : +86-755-8250 6288

FAX : +86-755-8250 6299

Web Site : www.winsemi.com