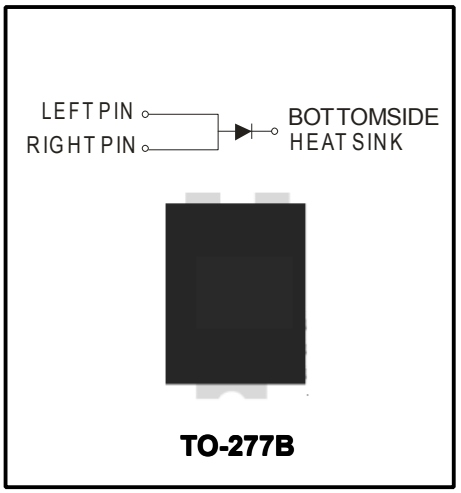
Features

- 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	50	V
$I_{F(AV)}$	Average forward current	15	A
I_{FSM}	Surge non repetitive forward current (8.3ms single half sine-wave)	320	A
$T_{J,}$	Junction Temperature	-50~150	℃
T_{stg}	Storage Temperature	-50~150	℃

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=3A @ 25°C	-	0.33	0.36	V
		I_F=10A @ 25°C	-	0.41	0.46	V
		I_F=15A @ 25°C	-	0.46	0.51	V
		I_F=3A @ 125°C	-	0.24	-	V
		I_F=10A @ 125°C	-	0.37	-	V
		I_F=15A @ 125°C	-	0.44	-	V
Reverse Breakdown Voltage	V_R	I_R =0.5mA	50	-	-	V
Reverse leakage current	I_R	V_R = 50V	-	-	0.280	mA
Junction Capacitance	C_J	f=1MHz,V_R=4V	-	850	-	pF
Thermal Resistance Junction to Ambient(note1)	$R_{th(JA)}$		-	94	-	℃/W
Thermal Resistance Junction to lead(note1)	$R_{th(JL)}$		-	10	-	℃/W

Note 1: Units mounted on recommended P.C.B. 1 oz. pad layout

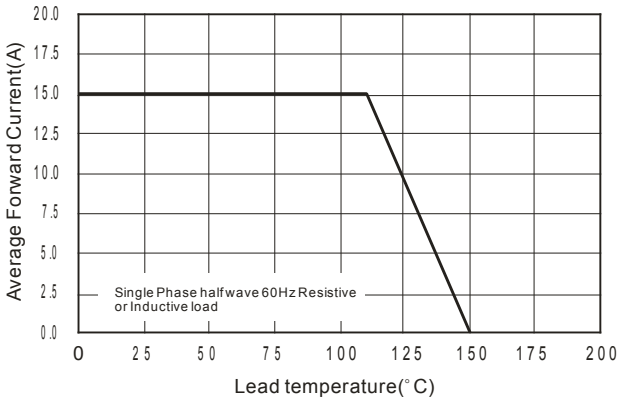


Fig.1 Typical Forward Current Derating Curve

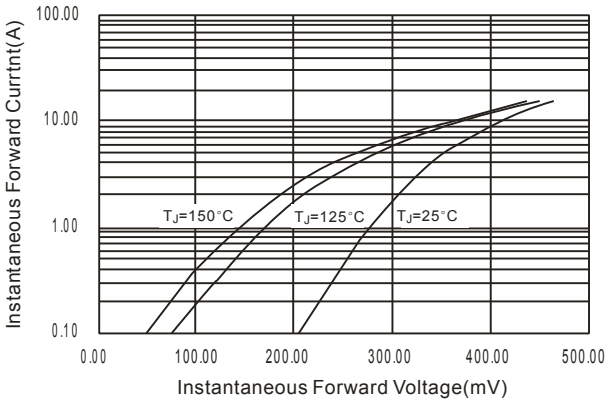


Fig.2 Typical Instantaneous Forward Characteristics

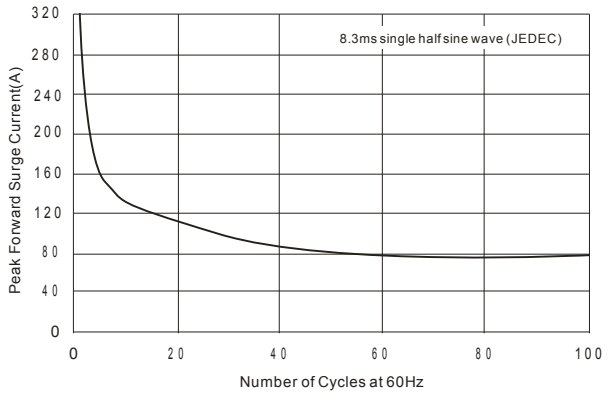


Fig.3 Maximum Non-Repetitive Forward Surge Current

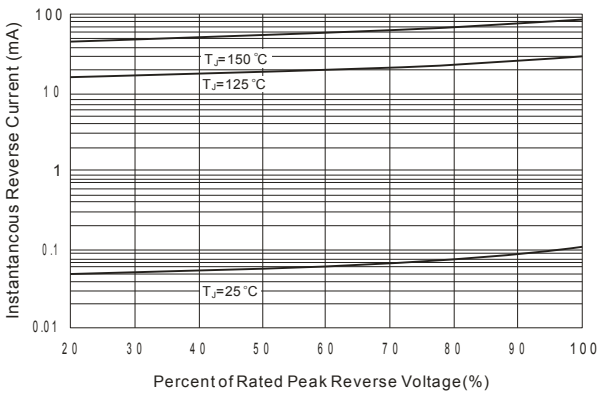


Fig.4 Typical Reverse Characteristics

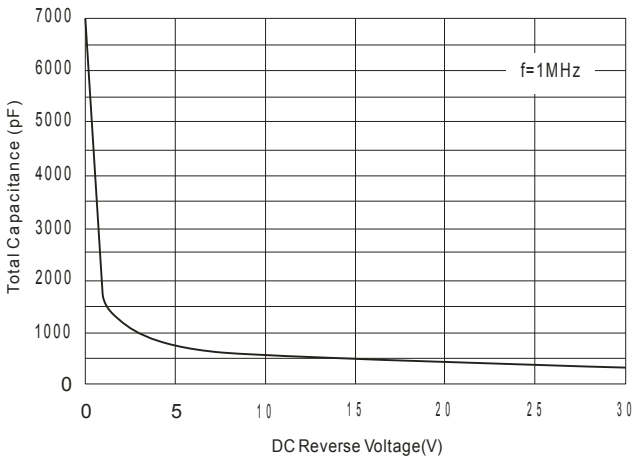
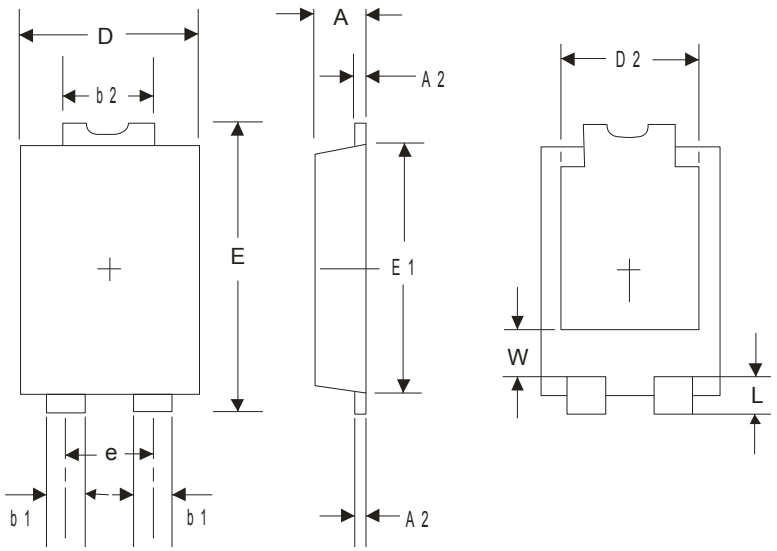


Fig.5 Total Capacitance vs.Reverse Voltage

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