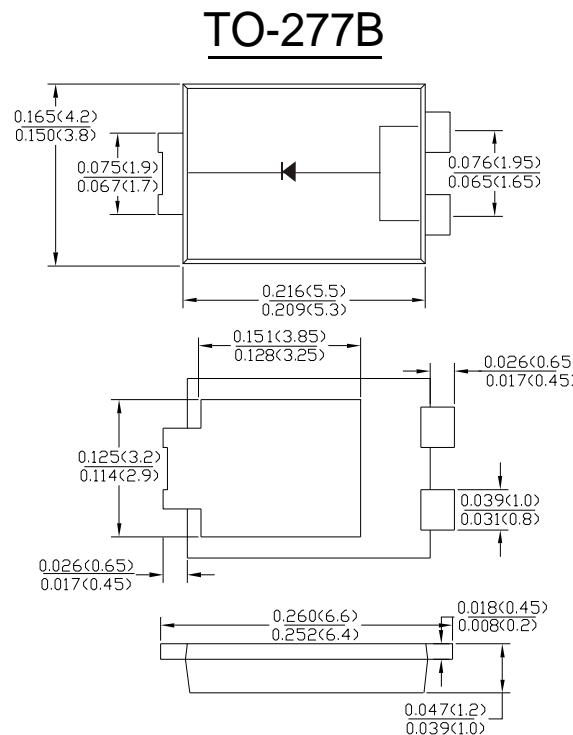


Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: TO-277B, molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Meet MSL level 1, per J-STD-020, LF Maximum peak of 260 °C
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	SB10T150L		Unit
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V_{RWM}	150		V
DC blocking voltage	V_{DC}			
RMS Rectified Voltage	$V_{R(RMS)}$	105		V
Average Rectified Output Current (Note1)	IF(AV)	10.0		A
Non-Repetitive Peak Forward Surge 8.3ms				
Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	150		A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	93.375		A^2s
Forward Voltage Drop	V_{FM}	Typ.		
$T_A = 25^\circ\text{C}$ @ $IF=3\text{A}$		0.66		-
$T_A = 25^\circ\text{C}$ @ $IF=5\text{A}$		0.71		0.76
$T_A = 25^\circ\text{C}$ @ $IF=10\text{A}$		0.79		0.88
Peak Reverse Current $T_A = 25^\circ\text{C}$	I_R	0.3		
At Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$		15		mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80		$^\circ\text{C/W}$
	$R_{\theta JL}$	15		
Operating junction temperature range	T_J	-55 to +150		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150		$^\circ\text{C}$

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4mm. Anode pad dimensions 5.6mm×14.4mm.

Fig.1 - Forward Current Derating Curve

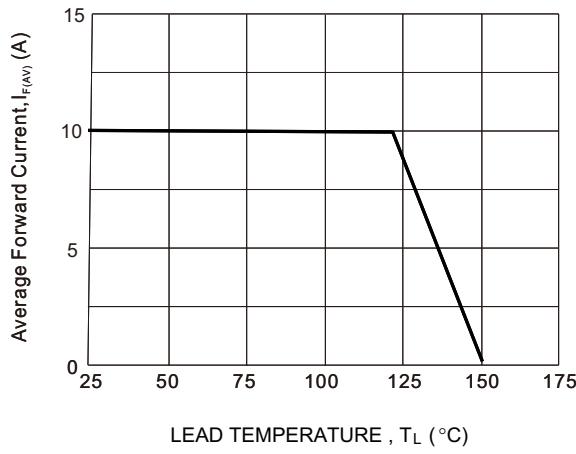


Fig. 2 Typical Forward Characteristics (per leg)

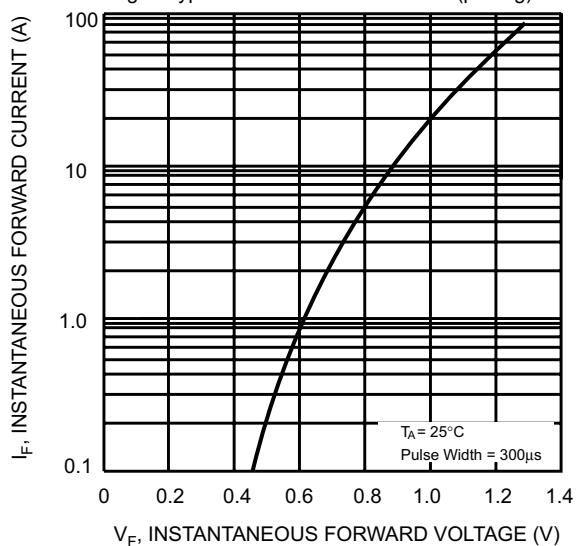


Fig. 3 Maximum Peak Forward Surge Current (per leg)

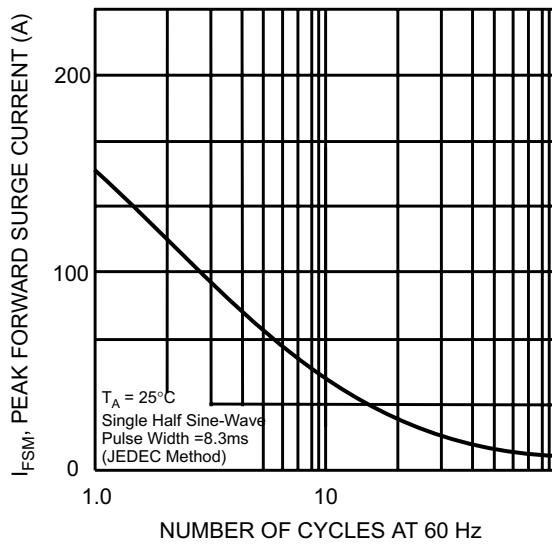


Fig4: Typical Reverse Characteristics

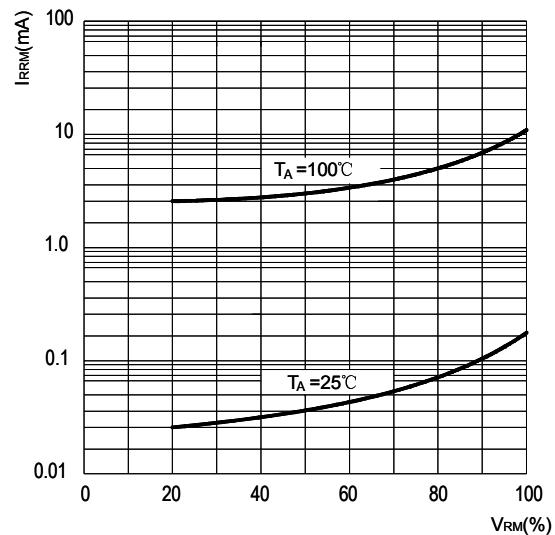


FIG.5 MOUNTING PAD LAYOUT

