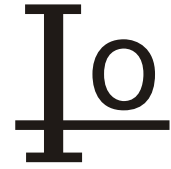


SB05T150L

5.0A Surface Mount Schottky Barrier Rectifiers

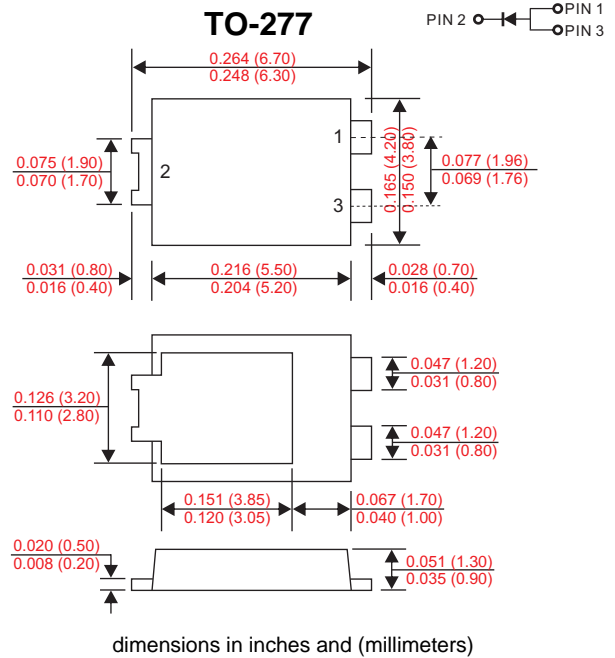


Features

- 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
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



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	SB05T150L		Unit
Peak Repetitive Reverse Voltage	V_{RRM}	150		V
Working Peak Reverse Voltage	V_{RWM}	150		V
DC blocking voltage	V_{DC}	150		V
RMS Rectified Voltage	$V_{R(RMS)}$	105		V
Average Rectified Output Current (Note1)	I_o	5.0		A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load (JEDEC Method) (Note2)	I_{FSM}	150		A
Forward Voltage Drop $T_A = 25^\circ\text{C}$ @ $I_F = 1\text{A}$ $T_A = 25^\circ\text{C}$ @ $I_F = 3\text{A}$ $T_A = 25^\circ\text{C}$ @ $I_F = 5\text{A}$	V_{FM}	Typ. 0.53 0.66 0.71	Max. - - 0.76	V
Peak Reverse Current At Rated DC Blocking Voltage	I_R	$T_A = 25^\circ\text{C}$ 0.3 $T_A = 100^\circ\text{C}$ 15		mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15		$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +150		$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +175		$^\circ\text{C}$
Voltage rate of change (Rated V_R)	dV/dt	10000		$\text{V}/\mu\text{s}$

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×14.4. Anode pad dimensions 5.6mm×14.4mm.

SB05T150L

5.0A Surface Mount Schottky Barrier Rectifiers

Fig.1 - Forward Current Derating Curve

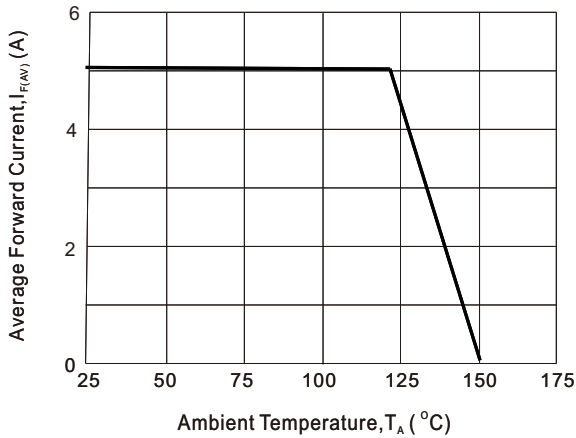


Fig. 2 Typical Forward Characteristics (per leg)

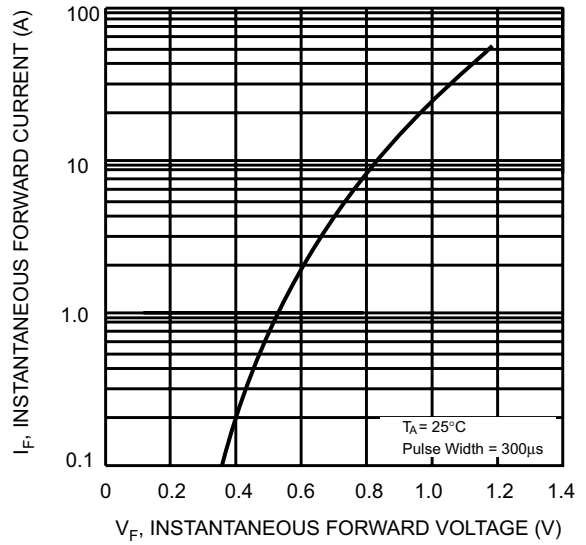


Fig. 3 Maximum Peak Forward Surge Current (per leg)

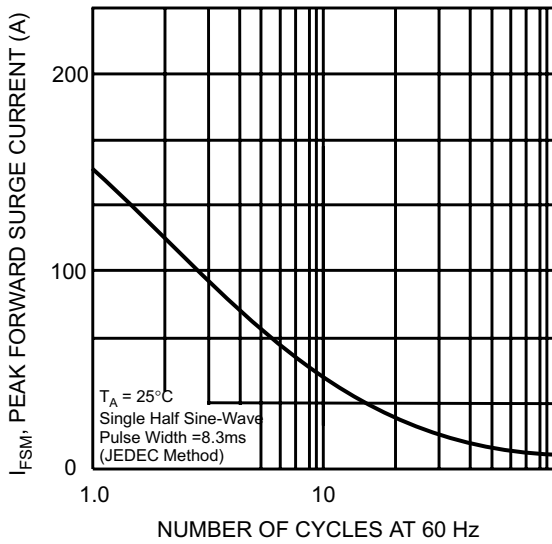


Fig4: Typical Reverse Characteristics

