

SB10100L TO-277

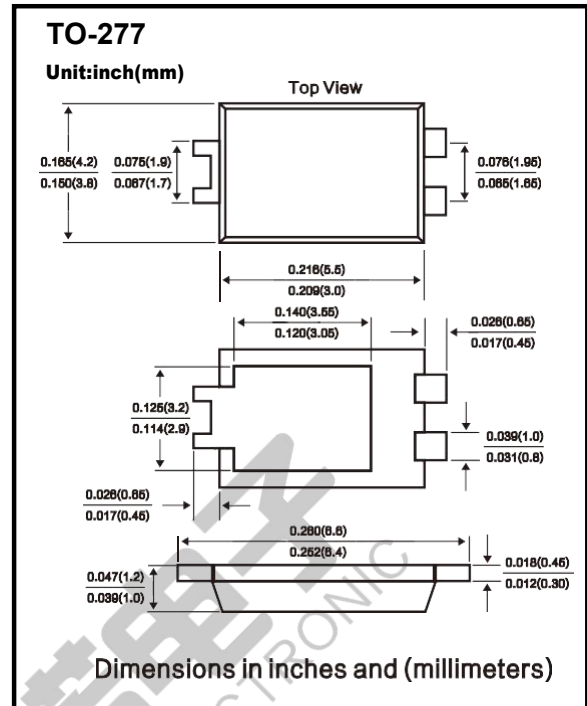
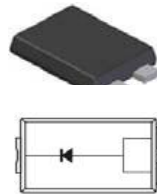
SCHOTTKY BARRIER RECTIFIER

FEATURES

- Ideal for Automated Placement
- Very low profile-typical high of 1.2mm
- Low Power Losses,High Efficiency Operation
- Guardring for overvoltage protection
- Low Thermal Resistance Package
- High Operating Junction Tempera
- Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- Case: TO-277M molded Plastic
- Terminals:Solderable per MIL-STD-750,Method 2026
- Polarity:
- Weight:0.090 grams(approx)
- Lead Free:For RoHS/Lead Free Version, Green molding compound as per IEC61249 Std



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter symbol	Symbol	SB10100L	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RSM voltage	V_{RSM}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_F(AV)$	10.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM1}	200	A
Thermal resistance, junction to ambient	$R_{\theta JA}$	40	C/W
Operating storage temperature range	T_J	-55 to +150	C
storage temperature range	T_{STG}	-55 to +175	C

Electrical Characteristics Ratings at 25 C ambient temperature unless otherwise specified.

Parameter symbol	Symbol	SB10100L		Unit
Maximum instantaneous forward voltage at 10.0A	VF	0.70		V
Maximum DCreverse current TC = 25 C	Ir	200		uA
Maximum DCreverse current TC = 100 C	Ir	1000		uA
Typical junction capacitance at 4.0V, 1MHz	CJ	500	380	PF

Notes:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

SB10100L

Fig. 1 Forward Current Derating Curve

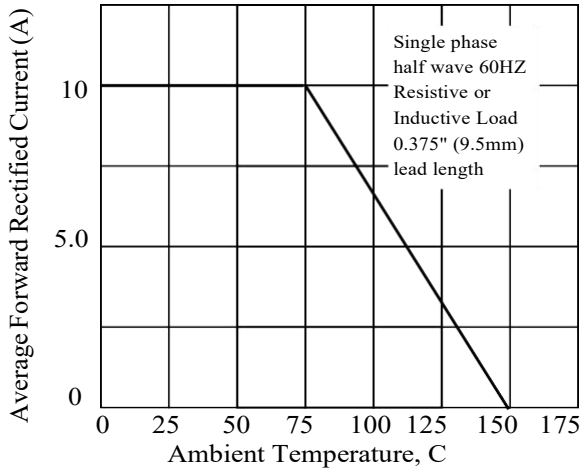


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

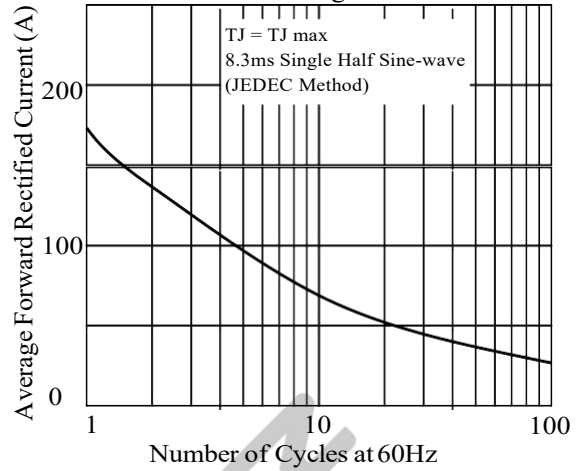


Fig 3. Typical Instantaneous Forward Characteristics

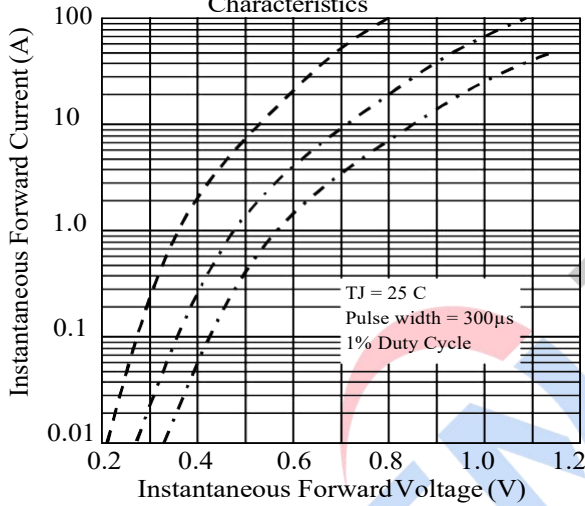


Fig 4. Typical Reverse Characteristics

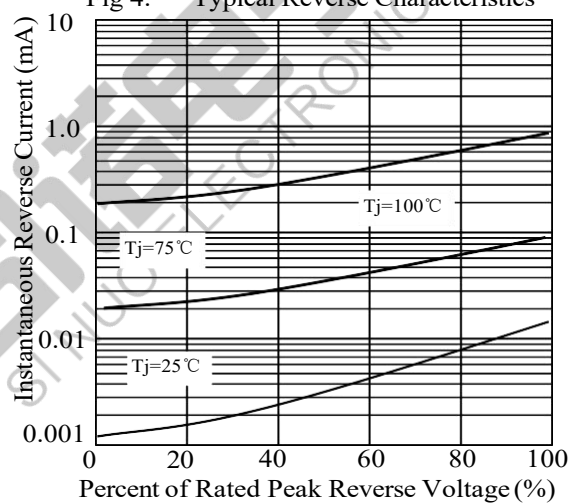


Fig 5. typical transient thermal impedance

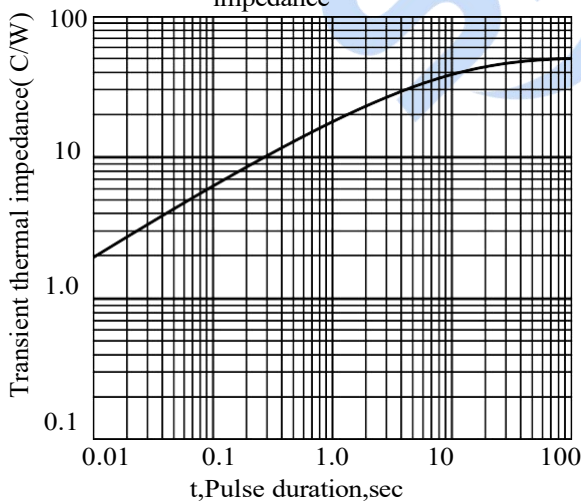


Fig 6. Typical Junction Capacitance

