

10.0Amp Surface Mount Schottky Barrier Rectifiers

Features

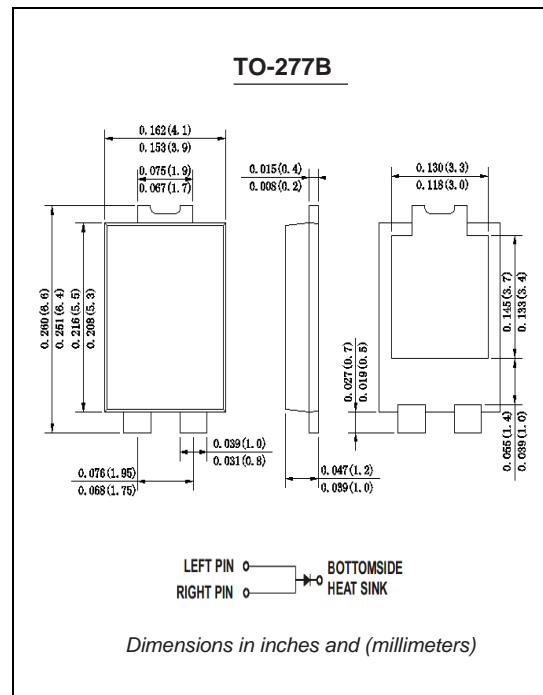
- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

Case: JEDEC TO-277B molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Mounting Position: Any



Maximum Ratings And Electrical Characteristics

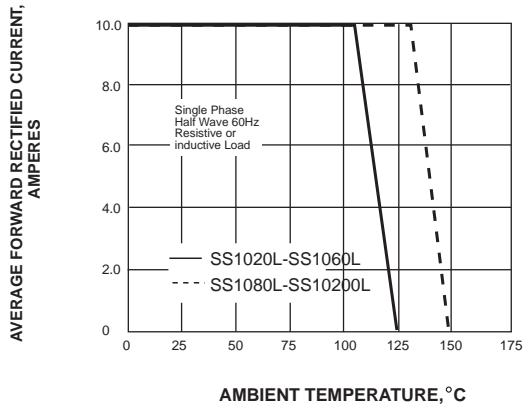
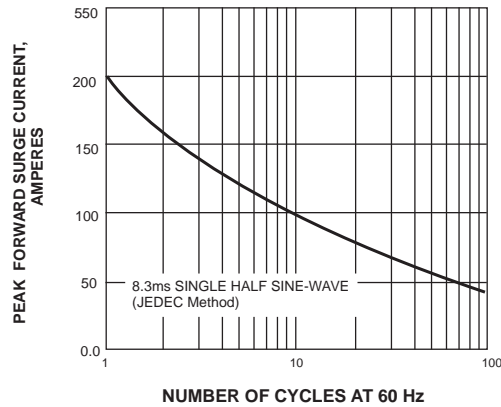
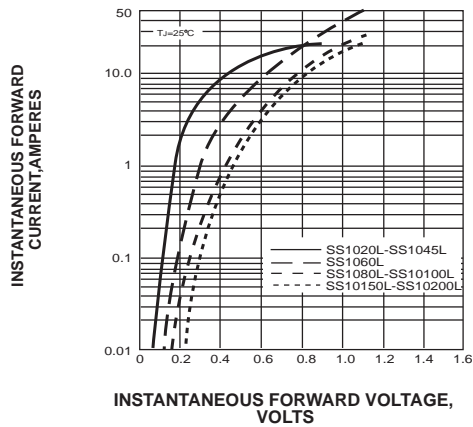
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SB 1020L	SB 1040L	SB 1045L	SB 1060L	SB 1080L	SB 10100L	SB 10150L	SB 10200L	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	45	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	32	42	56	70	105	150	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	45	60	80	100	150	200	VOLTS
Maximum average forward rectified current at $T_L=110^\circ\text{C}$	$I_{(AV)}$	10.0								Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0								Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.55		0.70	0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5						0.1		mA
		20.0		10.0		2.0				
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	75.0								C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150								°C

Note: 1.P.C.B. mounted with 8.0x8.0mm copper pad areas

Ratings And Characteristic Curves

SB1020L THRU SBS10200L

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
