

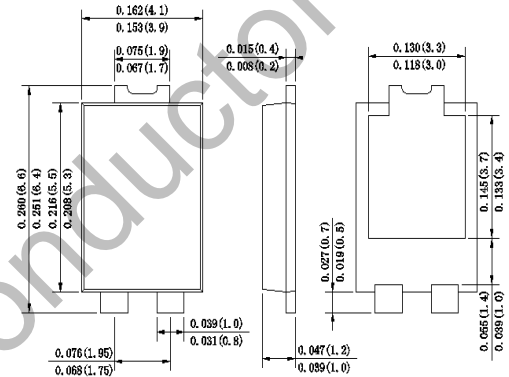
## 10.0Amp Surface Mount Schottky Barrier Rectifiers



TO-277B

## 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



LEFT PIN ○  
RIGHT PIN ○

○ BOTTOMSIDE  
○ HEAT SINK

Dimensions in inches and (millimeters)

## 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	$I_R$	$T_A=25^\circ\text{C}$			0.5			0.1	mA	
		$T_A=100^\circ\text{C}$			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

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FIG. 1- FORWARD CURRENT DERATING CURVE

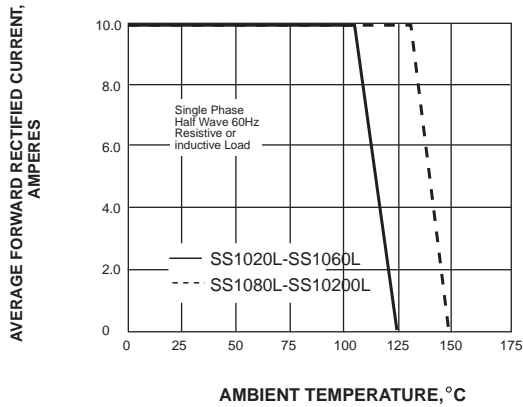


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

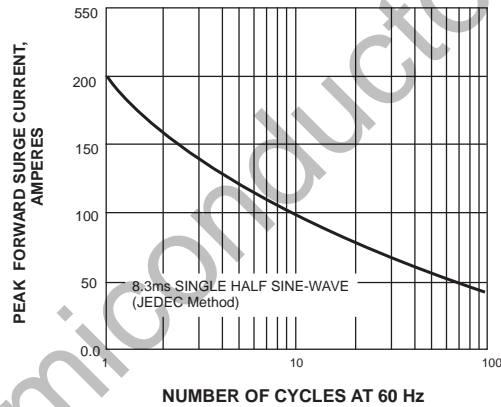


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

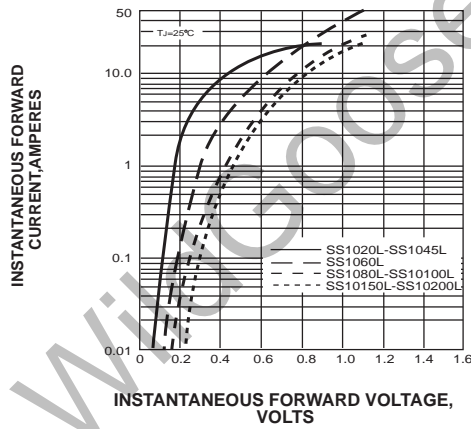


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

