

8 AMPS. SCHOTTKY BARRIER RECTIFIERS



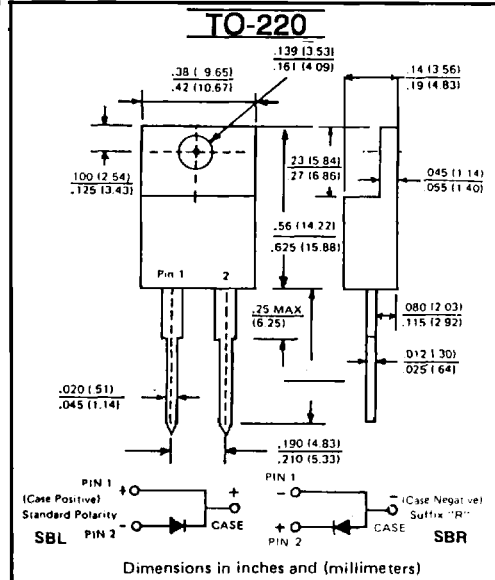
VOLTAGE RANGE
30 to 60 Volts
CURRENT
8.0 Amperes

FEATURES

- Plastic package has U/L
- Flammability Classification 94V-0
- Exceeds environmental standards of MIL-S-19500
- Metal of silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low V_F
- High surge capacity
- Guard ring for transient protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 Seconds /0.375" (9.5mm) lead lengths at 5 lbs (2.3kg) tension

MECHANICAL DATA

Case: TO-220 molded plastic
 Terminals: Lead solderable per MIL-STD-202 Method 208
 Polarity: As marked
 Mounting position: Any
 Weight: 0.08 ounces, 2.24 grams



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, derate current by 20%.

		SBL830	SBL835	SBL840	SBL845	SBL850	SBL860	UNITS
		SBR830	SBR835	SBR840	SBR845	SBR850	SBR860	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	35	40	45	50	60	V
Maximum RMS Voltage	V_{RMS}	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	V_{DC}	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current see Fig. 1	$I_{(AV)}$	8.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200						A
Maximum Instantaneous Forward Voltage $I_F = 8.0A, T_c = 25^\circ C$ (Note 3)	V_F	0.55			0.70			V
Maximum Average Reverse Current at $T_A = 25^\circ C$ Rated DC Blocking Voltage per element $T_A = 100^\circ C$	I_R	0.5			50			mA
Typical Thermal Resistance, (Note 1)	$R_{\theta JC}$	3						°C/W
Typical Junction Capacitance (Note 2)	C_J	700						pF
Maximum Operating Junction Temperature	T_J	-65 to +125						°C
Maximum Storage Temperature	T_{S1G}	-65 to +150						°C

- NOTES: 1. Thermal Resistance Junction to CASE.
 2. Measured at 1MHz and applied reverse voltage of 4.0 volts.
 3. 300µs Pulse Width, 2% Duty Factor.

