

II. Schottky Rectifier

2.0A Surface Mount Schottky Rectifier SB22~SB220

(Package: SMB (DO-214AA))

<p>FEATURES</p> <ul style="list-style-type: none"> • The plastic package carries Underwriters Laboratory flammability classification 94V-0 • Metal silicon junction, majority carrier conduction • Low power loss, high efficiency • High forward surge current capability • High temperature soldering guaranteed : 250 /10 seconds at terminals <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : JEDEC DO-214AA molded plastic body • Terminals : Solder plated, solderable per MIL-STD-750, method 2026 • Polarity : Color band denotes cathode end • Mounting Position : Any • Weight : 0.090 grams 	<p>Case: SMB Dimensions in inches and (millimetres)</p>
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Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	SB 22	SB 23	SB 24	SB 25	SB 26	SB 28	SB 210	SB 215	SB 220	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current at TL (see Fig. 1)	I_O	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50									Amps
Maximum instantaneous forward voltage at 2.0A DC	V_F	0.55		0.70		0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	I_R	0.5						1.0			mA
		20			10						
Typical junction capacitance (Note 1)	C_j	220			180			PF			
Typical thermal resistance (Note 2)	Rth-JA	75						45			°C/W
Operating junction temperature range	T_j	-65 to +125			-65 to +150			-55 to +150			°C
Storage temperature range	T_{stg}	-55 to +150									°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.

2. P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

Ratings and Characteristic Curves of SB22~SB220

