

2.0Amp Schottky Barrier Rectifiers

SB220~SB2200

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction,majority carrier conduction
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

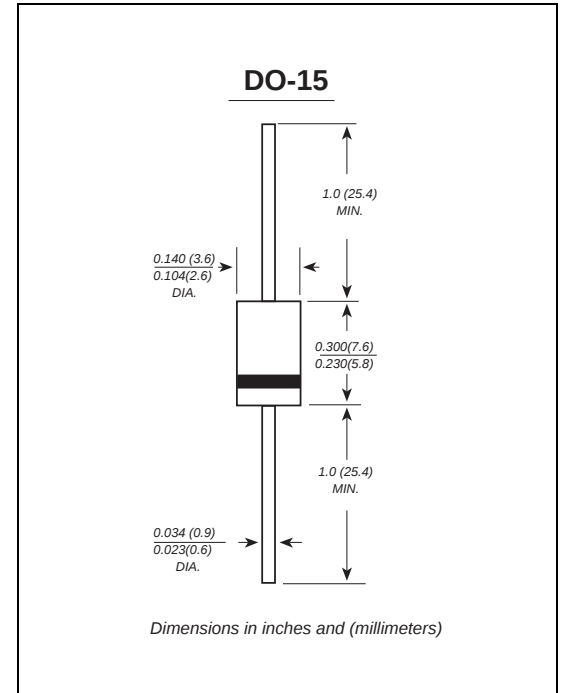
Case: JEDEC DO-15 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.014 ounce, 0.40 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 current derate by 20%.

	SYMBOLS	SB 220	SB 230	SB 240	SB 250	SB 260	SB 270	SB 280	SB 290	SB 2100	SB 2150	SB 2200	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	70	80	90	100	100	200	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length(see fig.1)	I _(AV)	2.0											Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60.0											Amps
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.70			0.85				0.95	Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5								0.2		mA	
		10.0				5.0				2.0			
Typical junction capacitance (NOTE 1)	C _J	220			80								pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0											°C/W
Operating junction temperature range	T _J	-65 to +125					-65 to +150					°C	
Storage temperature range	T _{STG}	-65 to +150											°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

Ratings And Characteristic Curves

SB220 THRU SB2200

FIG. 1- FORWARD CURRENT DERATING CURVE

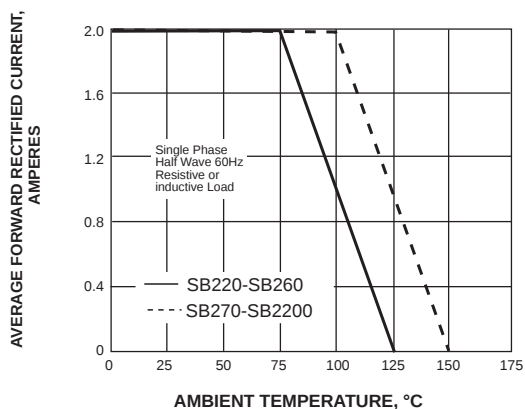


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

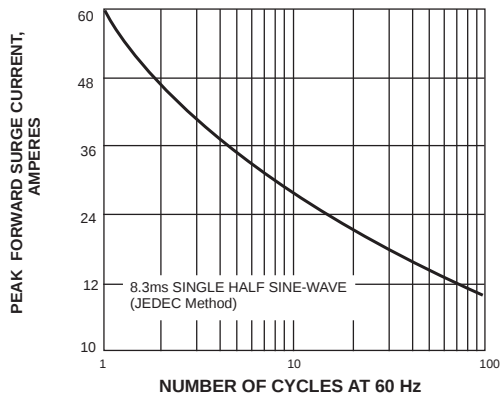


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

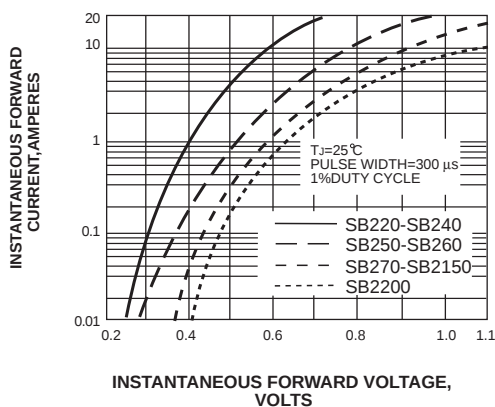


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

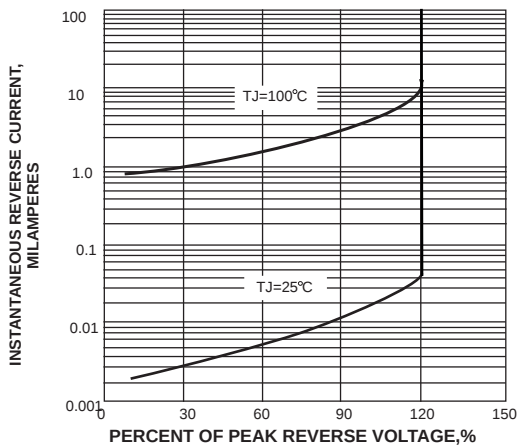


FIG. 5-TYPICAL JUNCTION CAPACITANCE

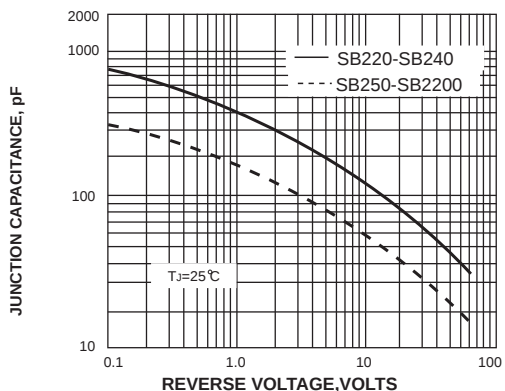


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

