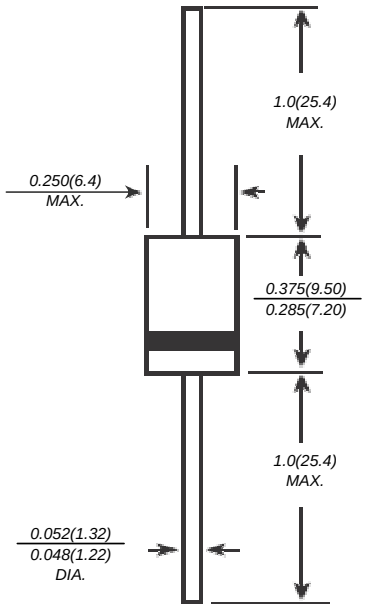
SB820 THRU SB8200

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 8.0 Ampere

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- Low Switching Noise.
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability

MECHANICAL DATA

Case: JEDEC DO-201AD, Molded plastic body
Terminals: Solderable per MIL-STD-750，Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Marking codes : Part Number

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOLS	SB 820	SB 830	SB 840	SB 850	SB 860	SB 880	SB 8100	SD 8150	SB 8200	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
Minimum DC Breakdown Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Average Rectified current at T_A =90℃	$I_{F(AV)}$	8.0									Amp
Non-repetitive Peak Forward Surge Current at t=8.3ms, Half Sine Wave	I_{FSM}	150									Amps
Maximum Instantaneous Forward Voltage at IF=8.0A TJ=25℃	V_F	0.65			0.70		0.85		0.92		Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage T_J=25℃	I_R	0.5							0.2		mA
Maximum DC Reverse Current At Rated DC Blocking Voltage T_J=100℃	I_R	50									mA
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	30									℃/W
Operating Junction Temperature Range	T_J	-55 ～ +150									℃
Storage Temperature Range	T_{STG}	-55 ～ +150									℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Mounted with minimum recommended padsize，PCBoard FR4.
3. T_J=25℃ unless otherwise specified.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

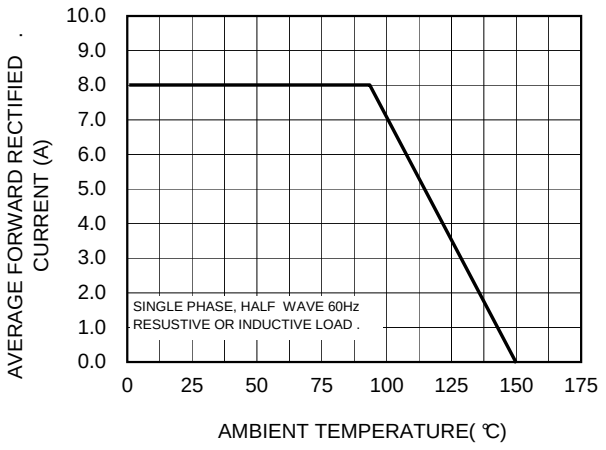

FIG. 2-MAXIMUM NON-REPETITIVE Forward Surge Current

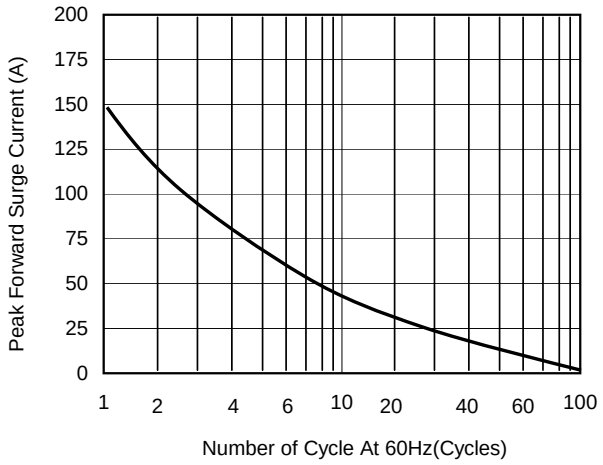

FIG. 3-JUNCTION CAPACITANCE CHARACTERISTICS

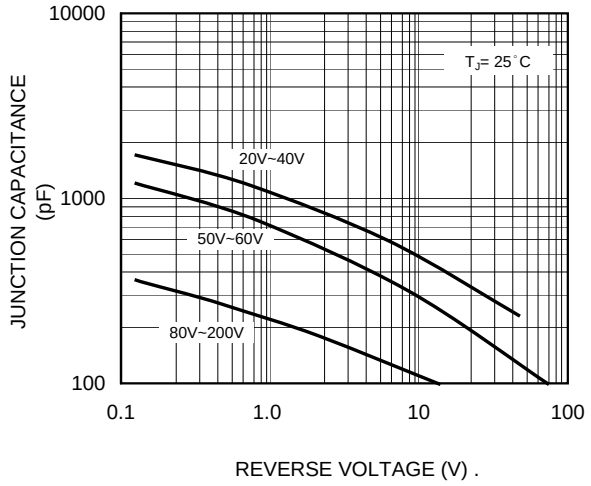
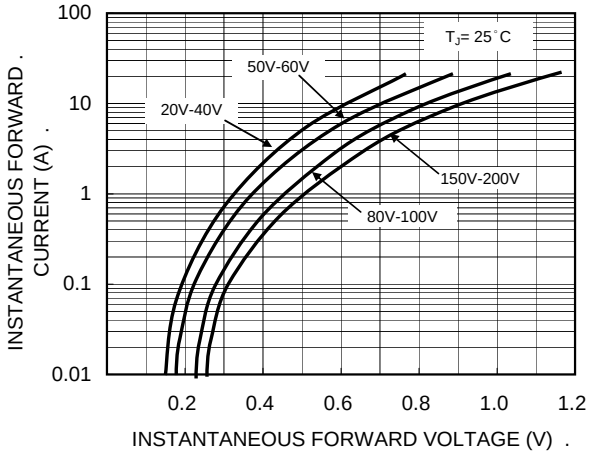
FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS