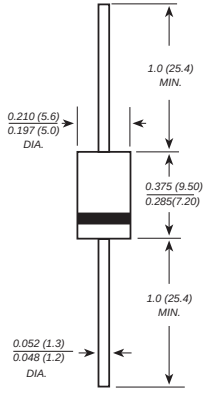
SB520 THRU SB5200

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current -5.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.04 ounce, 1.10 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

YXW Catalog Number	SYMBOLS	SB 520	SB 530	SB 540	SB 550	SB 560	SB 570	SB 580	SB 590	SB 5100	SB 5150	SB 5200	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	150	200	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length(see fig.1)	$I_{(AV)}$	5.0											Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0											Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.55			0.70		0.85					0.95	Volts
Maximum DC reverse current T_A=25℃	I_R	0.5									0.2		mA
at rated DC blocking voltage T_A=100℃		20.0					10.0				2.0		
Typical junction capacitance (NOTE 1)	C_J	500			400								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	25.0											°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

Download from alldatasheet.com

RATINGS AND CHARACTERISTIC CURVES SB520 THRU SB5200

FIG. 1- FORWARD CURRENT DERATING CURVE

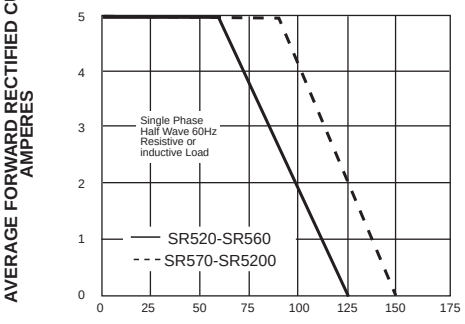


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

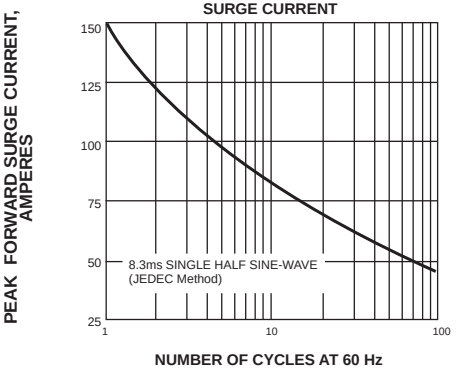


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

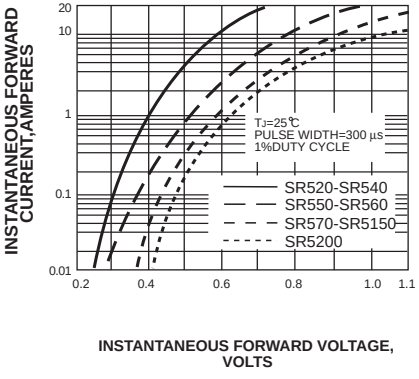


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

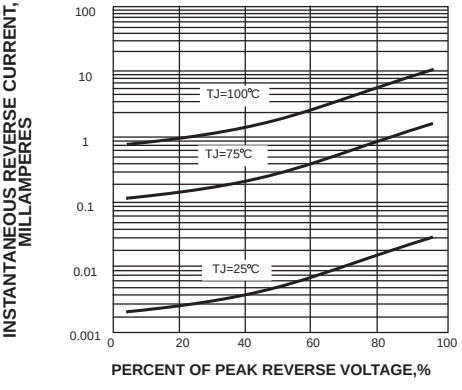


FIG. 5-TYPICAL JUNCTION CAPACITANCE

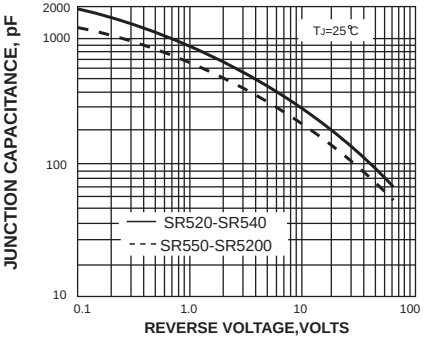
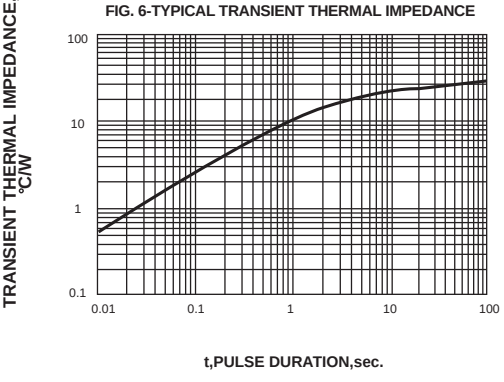


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Download from alldatasheet.com