



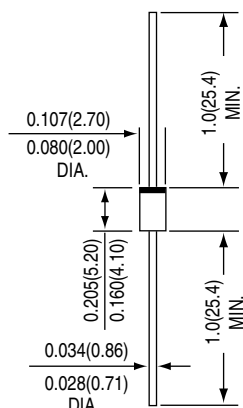
SB220 THRU SB2100

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

Forward Current - 2.0 Amperes

DO-204AL



*Dimensions in inches and (millimeters)



FEATURES

- * Compliance to RoHS product
- * Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- * Metal silicon junction, majority carrier conduction
- * Guardring for overvoltage protection
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * High surge capability
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering guaranteed :
260°C / 10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case : JEDEC DO-204AL Molded plastic body
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end
Mounting Position : Any
Weight : 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	SB220	SB240	SB260	SB2100	UNITS
Maximum repetitive peak reverse voltage	VRRM	20	40	60	100	Volts
Maximum RMS voltage	VRMS	14	28	42	70	Volts
Maximum DC blocking voltage	VDC	20	40	60	100	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I(AV)	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50				Amps
Maximum instantaneous forward voltage at 2.0 A	VF	0.50		0.70	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage TA=25°C TA=100°C	IR	0.5 10.0				mA
Typical thermal resistance (NOTE)	R θJA R θJL	35 12				°C / W
Operating junction and storage temperature range	TJ,TSTG	-65 to +125		-65 to +150		°C

NOTES : Thermal resistance junction to lead P.C.B. mounted 0.375" (9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES SB220 THRU SB2100

FIG.1 - FORWARD CURRENT DERATING CURVE

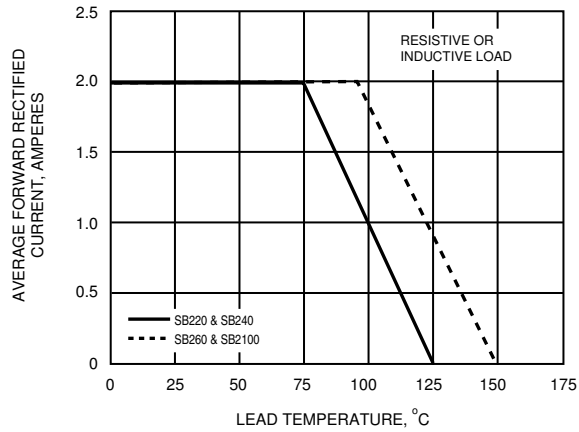


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

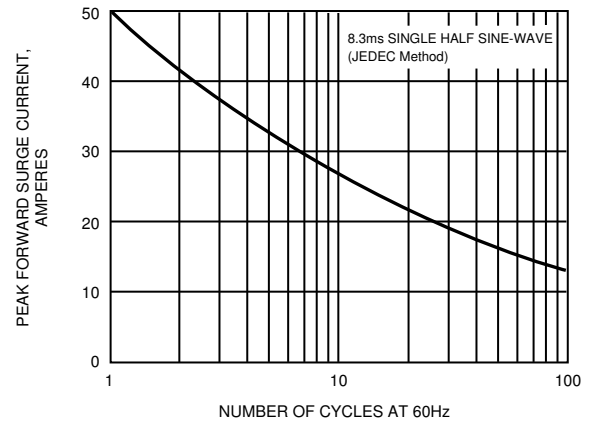


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

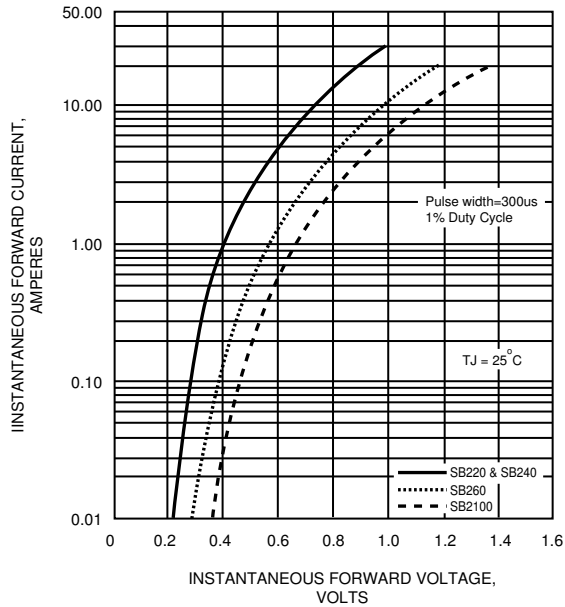


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

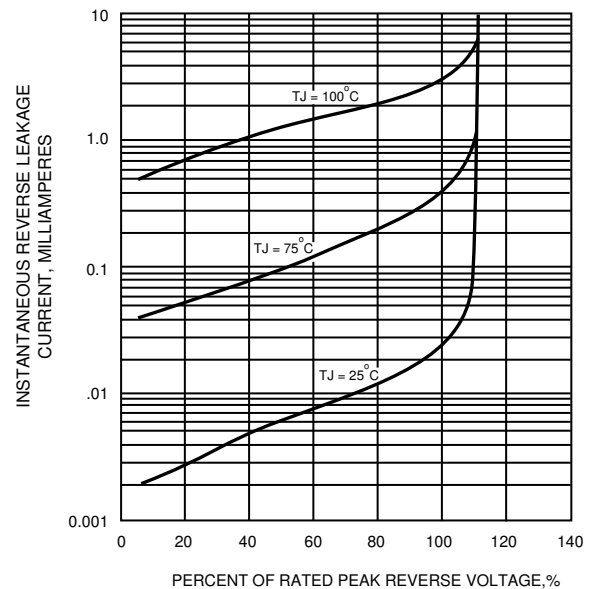


FIG.5 - TYPICAL JUNCTION CAPACITANCE

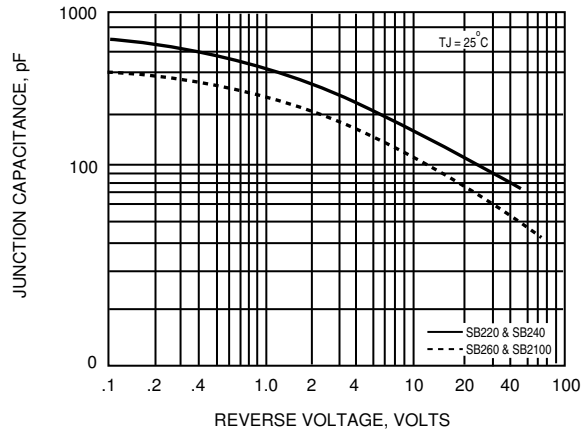


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

