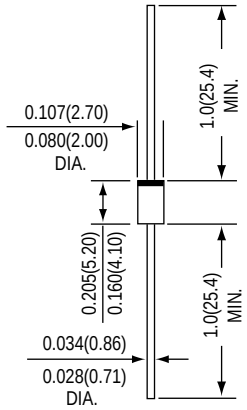
SB2120 THRU SB2200
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 120 to 200 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

MECHANICAL DATA

Case : JEDEC DO-204AL Molded plastic body
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : Cathode Band
Weight : 0.318 gram (approximate)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	***SB2120***	***SB2150***	***SB2200***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	120	150	200	Volts
Maximum RMS voltage	V_{RMS}	84	105	140	Volts
Maximum DC blocking voltage	V_{DC}	120	150	200	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)	I_{FSM}	50			Amps
Maximum instantaneous forward voltage at 2.0 A	V_F	0.85	0.87	0.90	Volts
Maximum instantaneous reverse current at rated DC blocking voltage T_A=25°C T_A=100°C	I_R	0.2 5.0			mA
Typical junction capacitance (NOTE)	C_j	100			pF
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	70 30			°C / W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150			°C

NOTES : Measured at 1.0MHz and applied reverse voltage of 4.0V DC

RATINGS AND CHARACTERISTIC CURVES SB2120 THRU SB2200

FIG.1 - FORWARD CURRENT DERATING CURVE

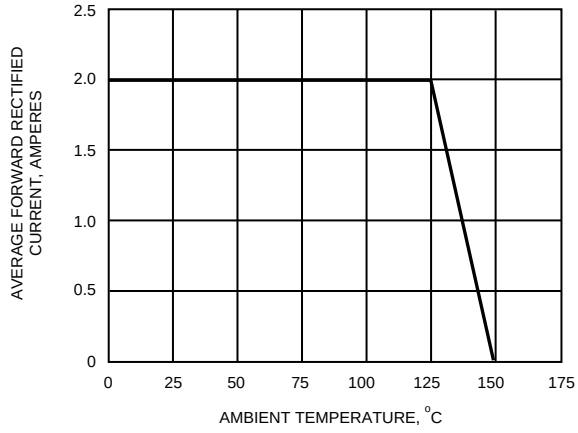


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

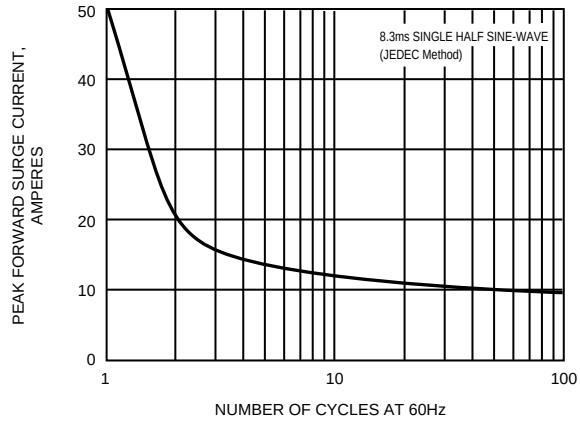


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

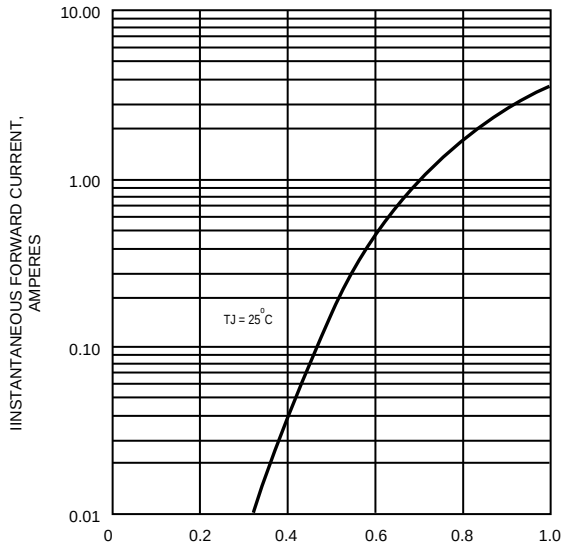


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

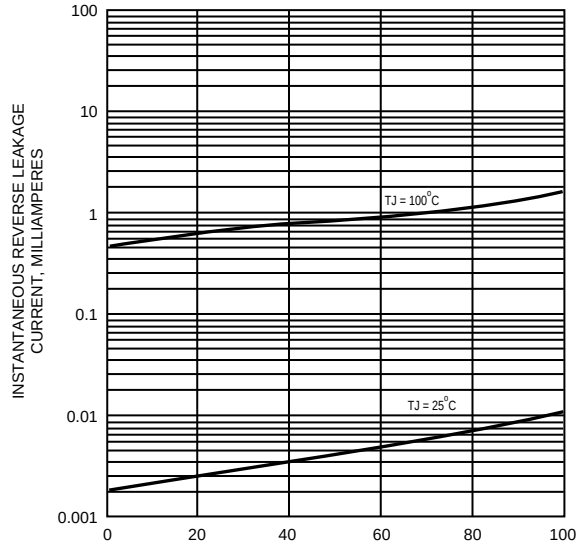


FIG.5 - TYPICAL JUNCTION CAPACITANCE