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SB5150 ~ SB5200

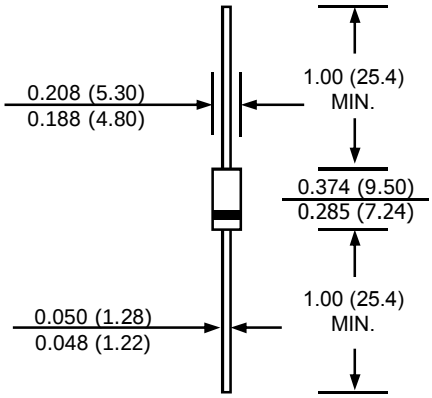
SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 150 ~ 200 Volts
I_O : 5.0 Amperes

FEATURES :
* High current capability
* High surge current capability
* High reliability
* Low forward voltage drop
* Pb / RoHS Free

MECHANICAL DATA :
* Case : DO-201AD Molded plastic
* Epoxy : UL94V-0 rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 1.1 grams

DO - 201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	SB5150	SB5200	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	200	V
Maximum RMS Voltage	V_{RMS}	105	140	V
Maximum DC Blocking Voltage	V_{DC}	150	200	V
Maximum Average Forward Current 0.375", 9.5mm Lead Length See Fig.1	$I_{F(AV)}$	5.0		A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	100		A
Maximum Forward Voltage at I_F = 5 A (Note 1)	V_F	0.91	0.94	V
Maximum Reverse Current at Ta = 25 °C	I_R	10		µA
Rated DC Blocking Voltage (Note 1) Ta = 100 °C	$I_{R(H)}$	10		mA
Typical Thermal Resistance	$R_{\Theta JA}$	10		°C/W
Operating Temperature Range	T_J	- 50 to + 125		°C
Storage Temperature Range	T_{STG}	- 65 to + 150		°C

Note : (1) Pulse Test : Pulse Width = 380 µs, Duty Cycle = 2%.

RATING AND CHARACTERISTIC CURVES (SB5150~SB5200)

FIG.1 - FORWARD CURRENT DERATING CURVE

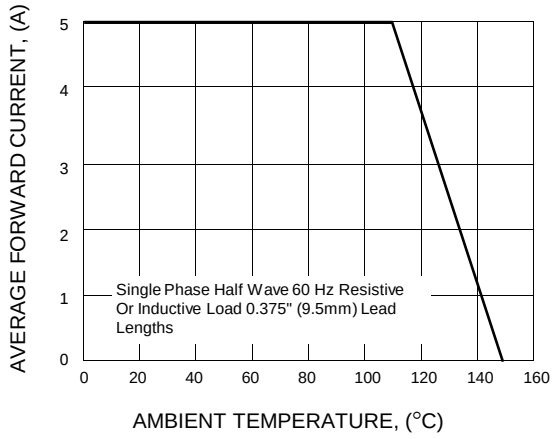


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

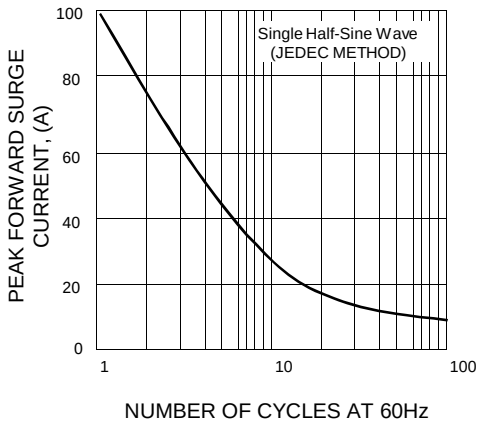


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

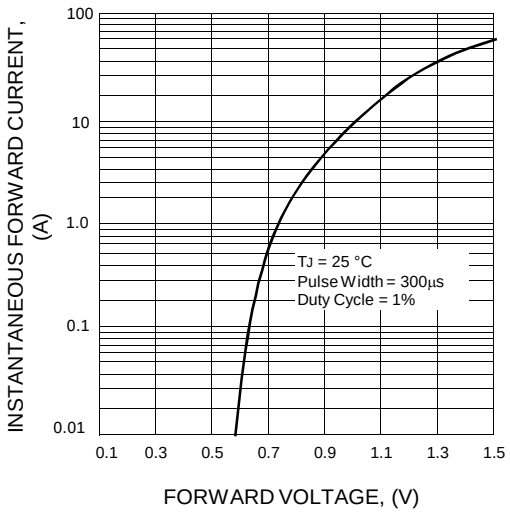


FIG.4 - TYPICAL REVERSE CHARACTERISTICS