



SOLID STATE DEVICES, INC.

14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
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Designer's Data Sheet

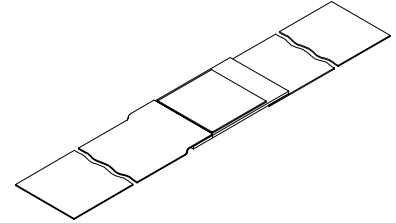
FEATURES:

- Designed for Space Use on Flexible Solar Pannels
- Hermetically Sealed.
- Wide Temperature Range: -100 to +150°C
- Qualified Design to 20,000 Temperature Cycles
- Flexible Leads - Welded or Soldered Termination
- Large Radiation Surface for Operation without Heatsink

SPB-002

**10 AMP
20 VOLTS
BYPASS
DIODE ASSEMBLY**

BDA



Maximum Ratings	SYMBOL	VALUE	UNITS
DC Blocking Voltage	V_R	20	Volts
Average Rectified Forward Current (Resistive Load, $T_C = 150^\circ\text{C}$)	I_o	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$)	I_{FSM}	150	Amps
Operating and Storage Temperature	$T_{OP} \ \& \ T_{STG}$	-100 TO +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction Case	$R_{\theta JC}$	0.8	$^\circ\text{C/W}$

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RC0062B

SPB-002

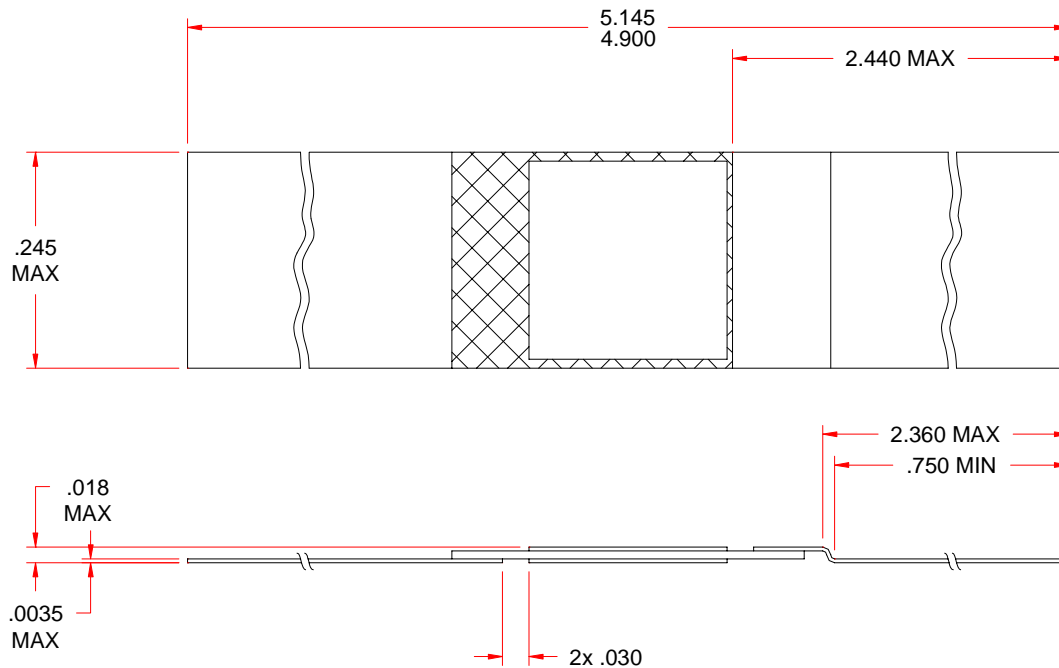


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Electrical Characteristics		SYMBOL	MIN	MAX	UNITS
Reverse Blocking Voltage ($I_R = 5\text{mA}_{DC}$, 300 μs min Pulse)	$T_A = 150^\circ\text{C}$	BV_{R1}	15	--	V_{DC}
	$T_A = 25^\circ\text{C}$	BV_{R2}	20	--	
	$T_A = -100^\circ\text{C}$	BV_{R3}	15	--	
Instantaneous Forward Voltage Drop ($I_F = 2.5\text{A}_{DC}$, 300 - 500 μs Pulse)	$T_A = 150^\circ\text{C}$	V_{F1}	--	0.7	V_{DC}
	$T_A = 25^\circ\text{C}$	V_{F2}	--	0.8	
	$T_A = -100^\circ\text{C}$	V_{F3}	--	2.0	
Reverse Leakage Current ($V_R = 9\text{V}_{DC}$, 300 μs min Pulse)	$T_A = 150^\circ\text{C}$	I_{R1}	--	3.0	mA
	$T_A = 25^\circ\text{C}$	I_{R2}	--	50	μA
	$T_A = -100^\circ\text{C}$	I_{R3}	--	3.0	mA

CASE OUTLINE: BDA



NOTES:

Consult manufacturing for operating curves.