SOLID STATE DEVICES, INC.
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SPB-002

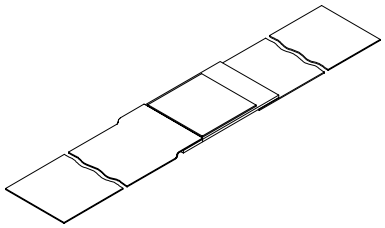
Designer's Data Sheet

10 AMP 20 VOLTS BYPASS DIODE ASSEMBLY

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**

BDA



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

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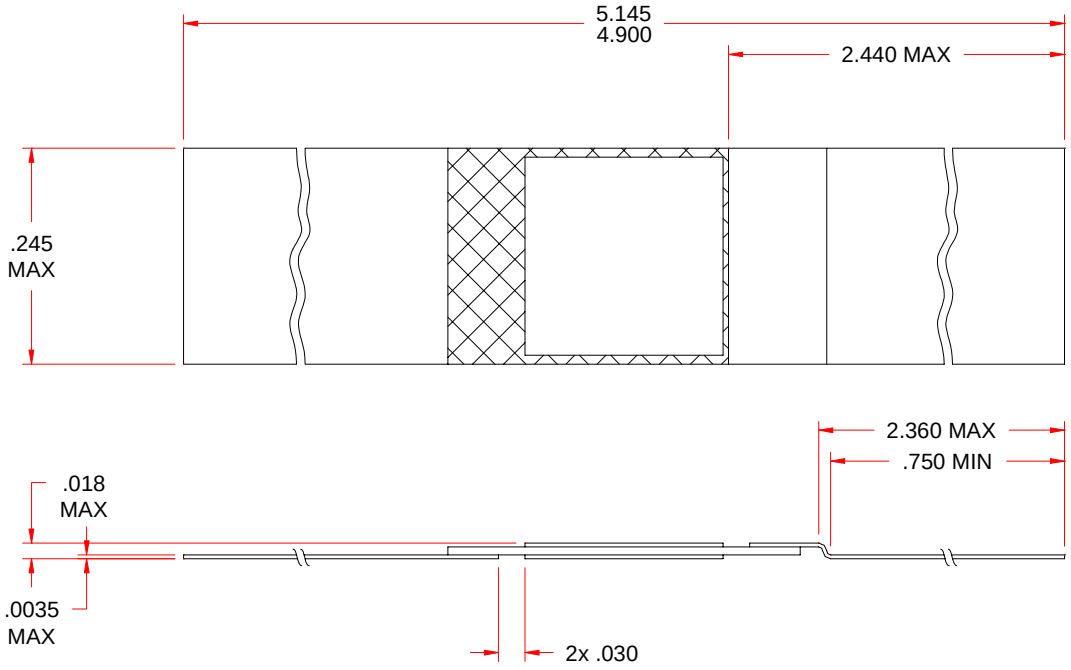
Electrical Characteristics		SYMBOL	MIN	MAX	UNITS
Reverse Blocking Voltage					
(I_R = 5mA$_{DC}$, 300µs min Pulse)	T_A = 150°C	**BV_{R1}**	**15**	--	**V_{DC}**
	T_A = 25°C	**BV_{R2}**	**20**	--	
	T_A = -100°C	**BV_{R3}**	**15**	--	
Instantaneous Forward Voltage Drop					
(I_F = 2.5A$_{DC}$, 300 - 500µs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

CASE OUTLINE: BDA



NOTES:

Consult manufacturing for operating curves.

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