



Solid State Devices, Inc.

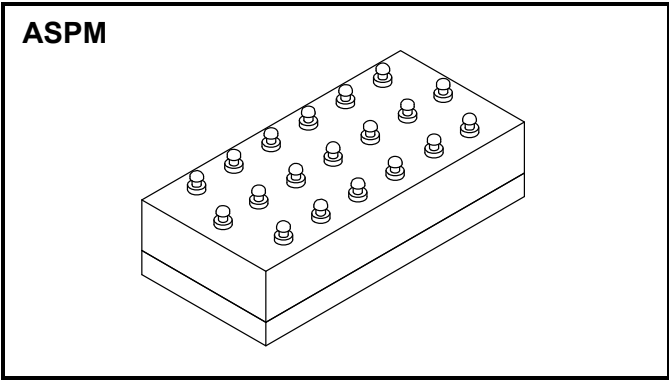
14701 Firestone Blvd. * La Mirada, CA 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

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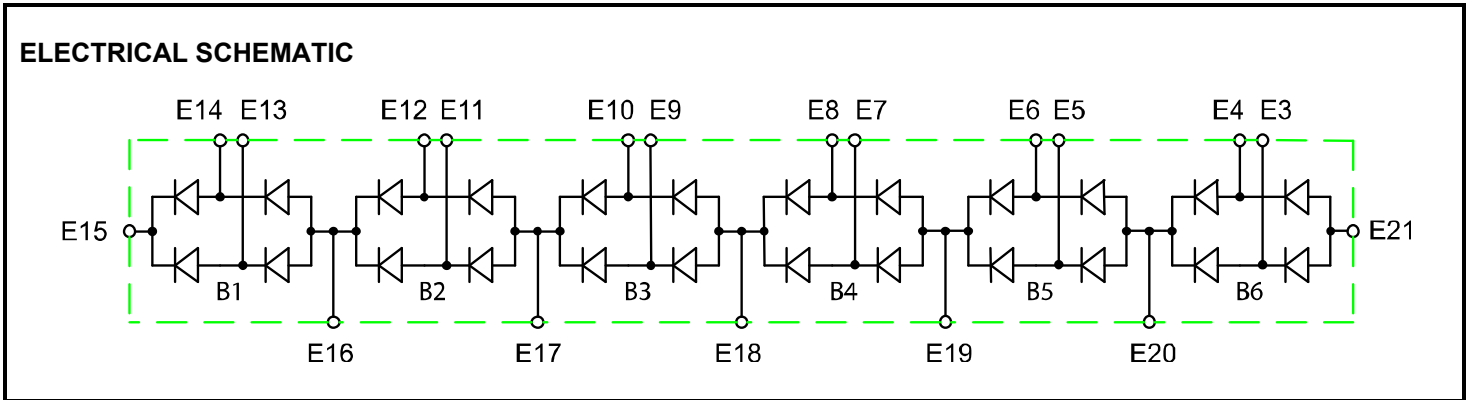
**1 AMP
 15,000 VOLTS
 HIGH VOLTAGE
 RECTIFIER BRIDGE STACK**

Designer's Data Sheet

- FEATURES:**
- Aerospace High Voltage Power Supply Applications
 - High Blocking Voltage – 15 kV Minimum
 - Low Mechanical Stress Design
 - Excellent Thermal Management – 2.5°C/W
 - TX, TXV, and Space Level Screening Available.
 - Consult Factory for:
 - Higher Blocking Voltages
 - Faster Switching Speeds
 - Other Electrical Configurations
 - Available with a sandblasted case to promote adhesion, add "SAB" suffix.



MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage (Each Bridge)	V_R	3,300	V
Average Rectified Forward Current (Non-Repetitive, $t = 8.3$ ms Pulse)	I_O	1	A
Peak Surge Current (Non-Repetitive, $t = 8.3$ ms Pulse, $T_A = 25^\circ\text{C}$)	I_{FSM}	25	A
Operating Temperature Range	T_{OP}	-65 to +150	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C
Maximum Thermal Resistance (Junction to Base)	$R_{\theta JB}$	2.5	°C/W





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ELECTRICAL CHARACTERISTICS ^{1/}	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (I _F = 1.0 A, 300 μs Pulse minimum)	V _{F1}	—	7.5	V
Reverse Leakage (V _R = 2500 V, 300 μs Pulse minimum)	I _{R1} I _{R2}	— —	1.0 50	μA
Insulation Resistance (All Terminals to Base @ 15,000 V)	R _{INSUL1}	10	—	GΩ
Reverse Recovery Time (I _F = 0.5 A, I _R = 1.0 A, I _{RR} = 0.25 A)	t _{RR}	—	60	ns

NOTE: ^{1/} All Electrical Characteristics are for Bridge Leg @ T_A = 25°C (Unless Otherwise Specified)

