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

SDA475-02

3 AMP / 18,000 VOLTS
HIGH VOLTAGE
MULTIPLIER RECTIFIER STACK

Designer's Data Sheet

Part Number/Ordering Information [1/]

SDA475- 02 S

Screening [2/]
__ = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

Voltage
02 = 18,000 Volts

FEATURES:

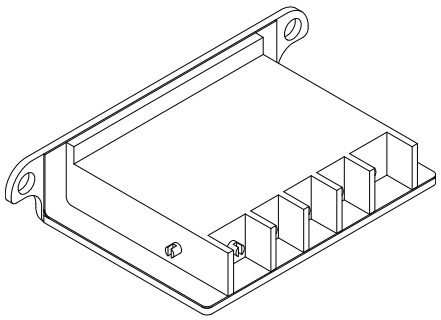
- Aerospace high voltage power supply applications
- High blocking voltage: 18 kV minimum
- Low mechanical stress design
- Excellent thermal management: 2.5°C/W
- TX, TXV, and S-level screening available [2/]
- Consult factory for:
  - Higher blocking voltages
  - Faster switching speeds
  - Other electrical configurations

MAXIMUM RATINGS [3/]	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage Each rectifier	V_{RM} V_{RWM} V_R	6,000	Volts
Average Rectified Forward Current Non-repetitive, t = 8.3 ms pulse	I_O	3	Amps
Peak Surge Current Non-repetitive, t = 8.3 ms pulse, T_A = 25°C	I_{FSM}	25	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +150	°C
Thermal Resistance, Junction to Base	Θ_{JB}	2.5	°C/W

NOTES:

1/ For ordering information, price, operating curves, and availability- contact factory.
2/ Screening based on MIL-PRF-19500. Screening flows available on request.
3/ Unless otherwise specified, all electrical characteristics @ 25°C.

ASPM



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ELECTRICAL CHARACTERISTICS (Each rectifier) 3/

PARAMETER		SYMBOL	MIN	MAX	UNIT
Instantaneous Forward Voltage Drop I_F = 0.6A		V_F	--	10	Volts
Reverse Leakage V_R = 6,000V	T_B = 25°C T_B = 100°C	I_{R1} I_{R2}	-- --	2 200	µA
Insulation Resistance All terminals to base @15,000V		R_{INSUL1}	10	-	GΩ
Reverse Recovery Time I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A		t_{RR}	--	70	nsec

Package Outlines: ASPM