



SOLID STATE DEVICES, INC.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

Designer's Data Sheet

FEATURES:

- Ultra Fast Recovery: 150 nsec Maximum
- 2000 V Blocking Voltage
- 5000 V Dielectric Voltage
- Average Output Current 10 Amps
- Low Reverse Leakage Current
- Glass Passivated Rectifiers
- Hermetically Sealed Discretes
- Aluminum Base for Maximum Thermal Conductivity
- TX and TXV Level Screening Available

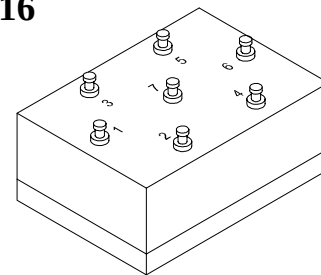
SPA516-2F

10 AMPS

150 nsec

**FAST RECOVERY
DUAL SINGLE PHASE
BRIDGE ASSEMBLY**

SPA516



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	2000	Volts
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave) $T_C = 25^{\circ}\text{C}$ $T_C = 100^{\circ}\text{C}$	I_o	10 4	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^{\circ}\text{C}$, per leg)	I_{FSM}	75	Amps
Operating and Storage Temperature Junction Temperature	T_{OP} & T_{stg} T_J	-55 TO +150 -55 TO +175	$^{\circ}\text{C}$
Maximum Thermal Resistance Junction to Case (per Assebly) Junction to Case (per Leg)	θ_{JC}	1.125 9.0	$^{\circ}\text{C/W}$

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

DATA SHEET # : RA0019A

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Electrical Characteristics ^{1/} (per leg)	SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 3A$, 300 - 500 μ sec pulse)	V_{F1}	4.4	Vdc
Reverse Leakage Current (Rated V_R , 300 μ s pulse minimum)	I_{R1}	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ s pulse minimum)	I_{R2}	0.5	mA
Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$)	t_{RR}	150	nsec

^{1/} $T_A = 25^\circ C$, Unless otherwise specified

CASE OUTLINE: SPA516

