SOLID STATE DEVICES, INC.
14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
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SPA516L-3UF

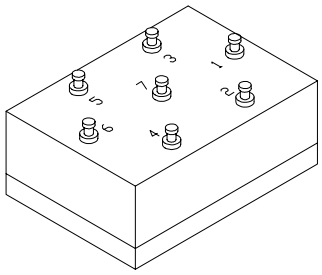
Designer's Data Sheet

3 AMPS
70 nsec
ULTRA FAST RECOVERY
DUAL SINGLE PHASE
BRIDGE ASSEMBLY

FEATURES:

- **Ultra Fast Recovery: 70 nsec Maximum**
- **3000 V Blocking Voltage**
- **6000 V Dielectric Voltage**
- **Average Output Current 3 Amps**
- **Low Reverse Leakage Current**
- **Glass Passivated Rectifiers**
- **Hermetically Sealed Discretes**
- **Aluminum Base for Maximum Thermal Conductivity**
- **TX and TXV Level Screening Available**

SPA51(



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	3000	**Volts**
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave) $T_C = 25^oC$ $T_C = 100^oC$	**Io**	3 1.5	**Amps**
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^oC$, per leg)	I_{FSM}	75	**Amps**
Operating and Storage Temperature **Junction Temperature**	T_{OP} & Tstg T_J	-55 TO +150 -55 TO +175	**^oC**
Maximum Thermal Resistance Junction to Case (per Assebly) Junction to Case (per Leg)	θ_{JC}	1.125 9.0	**$^oC/W$**

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

DATA SHEET # : RA0020B

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Electrical Characteristics [1/] (per leg)		SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop (300 - 500µsec pulse)	I_F = 0.5A I_F = 1A I_F = 3A	**V_{F1}** **V_{F2}** **V_{F3}**	3.75 4.35 5.70	**Vdc**
Reverse Leakage Current (Rated V_R, 300µs pulse minimum)	T_A = 25ºC T_A = 100ºC	**I_{R1}** **I_{R2}**	10 1.0	**µA** **mA**
Reverse Recovery Time (I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A)		**t_{RR}**	70	**nsec**
Isolation Resistance (All Terminals in Common to Case) (V = 6000V)		**R_{ISO}**	1.0	**GΩ**

1/ T_A = 25ºC, Unless otherwise specified

CASE OUTLINE: SPA516