



SOLID STATE DEVICES, INC.

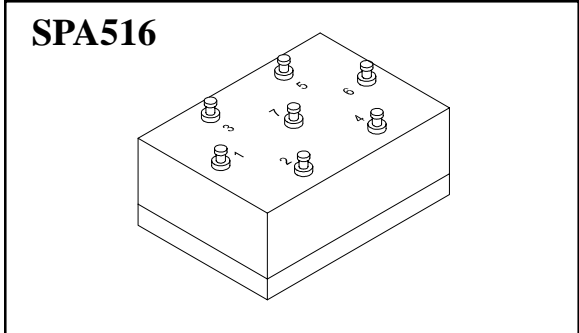
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Designer's Data Sheet

SPA516-2F

**10 AMPS
 150 nsec
 FAST RECOVERY
 DUAL SINGLE PHASE
 BRIDGE ASSEMBLY**

- 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



| 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) | 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

