SSDI
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SPA516L-3UF

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

Designer's Data Sheet

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**
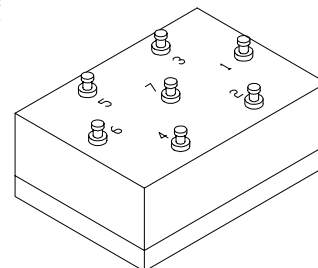- **TX and TXV Level Screening Available**

SPA516

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) $T_C = 25^oC$ $T_C = 100^oC$	I_o	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

SPA516L-3UF

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)	$T_A = 25^oC$ $T_A = 100^oC$	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/ $T_A = 25^oC$, Unless otherwise specified

CASE OUTLINE: SPA516