



PRELIMINARY

SOLID STATE DEVICES, INC.

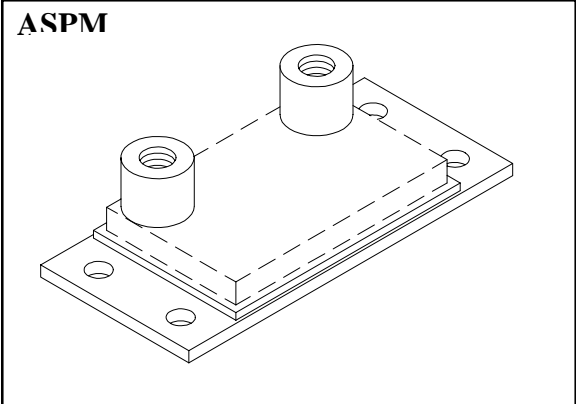
14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773

**SPMS506-01 & -01M
SPMS506-01F & -01FM**

DESIGNER'S DATA SHEET

**150 AMPS DISCHARGE
50 AMPS CHARGE CURRENT
BATTERY BYPASS
POWER MODULE**

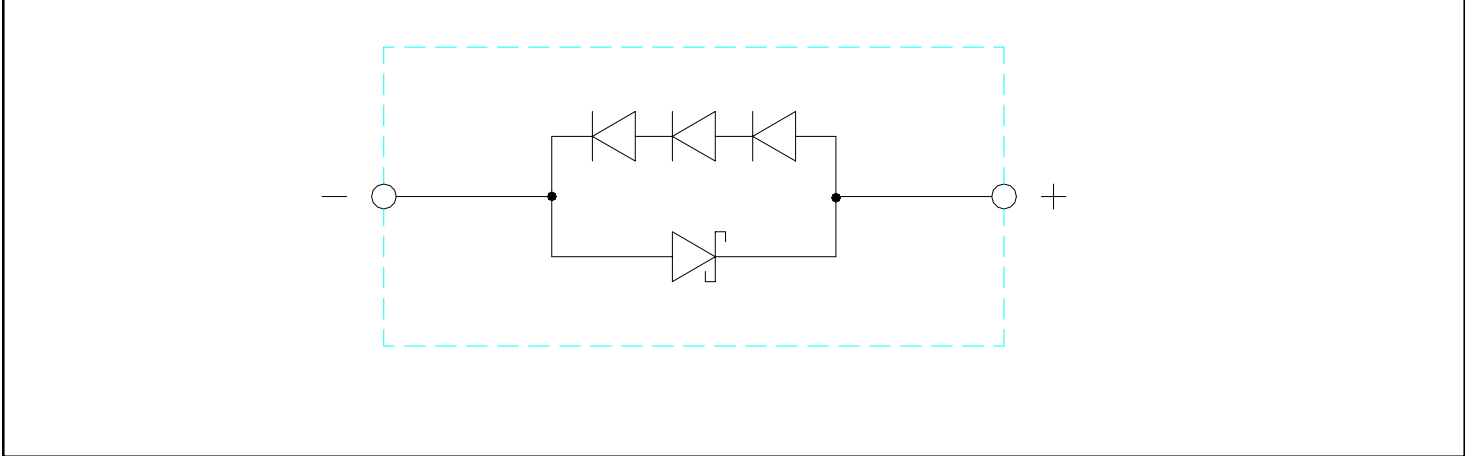
- FEATURES:**
- Space Flight Proven Heritage.
 - High Charge/Discharge Current.
 - Low Forward Discharge Voltage (V_{FD})
 - Guaranteed Minimum Charge Voltage (V_{FC})
 - Compact and Rugged Construction Offering Weight and Space Savings.
 - Very Low Mechanical Stress and Thermal Resistance.
 - Hermetic Sealed Discrete Elements.
 - Excellent Thermal Management.
 - TX, TXV, and S-Level Screening Available Upon Request.
 - Available with Male or Female and Inch or Metric Terminals.



MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Discharge Current (Schottky's)	I_D	150	Amps
Charge Current (Rectifiers)	I_C	50	Amps
Discharge Surge Current (Non-repetitive, $t = 8.3$ ms Pulse)	I_{DP}	750	Amps
Operating and Storage Temperature Range	T_{OP} & T_{STG}	-65 TO +150	$^{\circ}C$
Thermal Resistance, Junction to Base	Discharging Leg Charging Leg	θ_{JBd} θ_{JBc}	$^{\circ}C/W$
		0.75 0.45	

ELECTRICAL SCHEMATIC



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

DATA SHEET #: PM0011A

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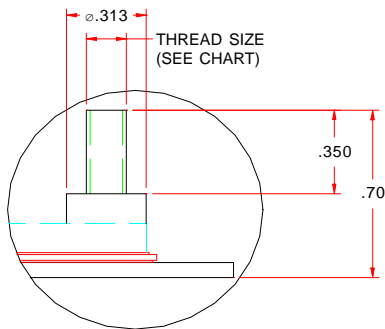
ELECTRICAL CHARACTERISTICS

RATING		SYMBOL	MIN	MAX	UNIT
Forward Discharge Voltage ($T_A = 25^\circ\text{C}$)	$I_F = 20\text{A}$	V_{FD1}	--	.450	Volts
	$I_F = 50\text{A}$	V_{FD2}	--	.550	
	$I_F = 100\text{A}$	V_{FD3}	--	.680	
	$I_F = 150\text{A}$	V_{FD4}	--	.800	
Forward Discharge Voltage ($I_F = 50\text{A}$)	$T_A = -55^\circ\text{C}$	V_{FD5}	--	.650	Volts
	$T_A = +125^\circ\text{C}$	V_{FD6}	--	.480	
Forward Charge Voltage ($T_A = 25^\circ\text{C}$)	$I_F = 350\text{mA}$	V_{CD1}	1.65	--	Volts
	$I_F = 5\text{A}$	V_{CD2}	--	2.52	
	$I_F = 10\text{A}$	V_{CD3}	--	2.65	
	$I_F = 25\text{A}$	V_{CD4}	--	3.00	
	$I_F = 50\text{A}$	V_{CD5}	--	3.30	
Forward Charge Voltage ($I_F = 25\text{A}$)	$T_A = -55^\circ\text{C}$	V_{CD6}	--	3.20	Volts
	$T_A = +125^\circ\text{C}$	V_{CD7}	--	2.50	
Insulation Resistance (All terminals to Base @ 1000V)		R_{INSUL}	1.0	--	$G\Omega$

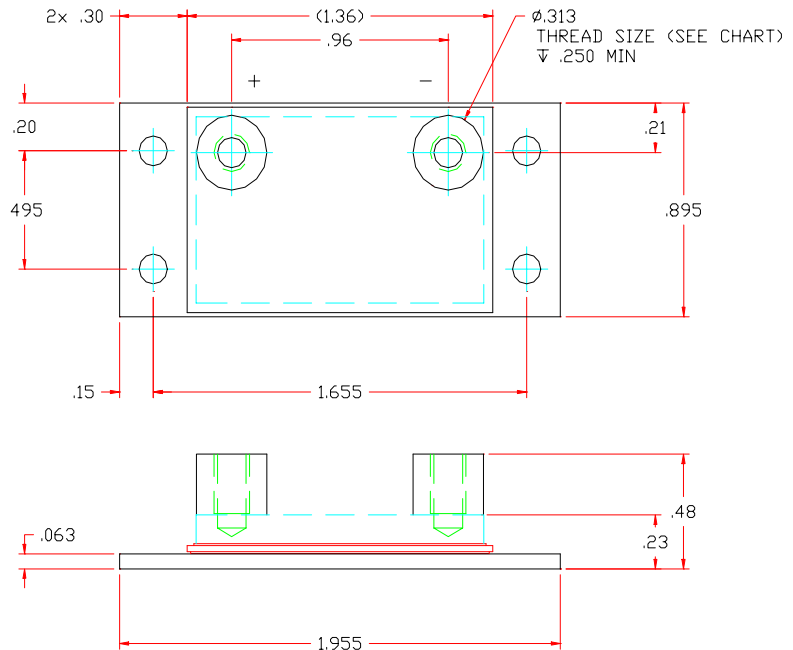
PACKAGE OUTLINE: ASPM

(Unless otherwise specified)

All dimensions are in inches



Optional Terminal
(Suffix F or FM)



THREAD STYLE/SIZE

PART No.	THREAD TYPE	THREAD SIZE
SPMS506-01	INCH MALE	6-32 UNC-2A
SPMS506-01F	INCH FEMALE	6-32 UNC-2B
SPMS506-01M	METRIC MALE	M4 x 0.7
SPMS506-01FM	METRIC FEMALE	M4 x 0.7

Tolerances
(Unless specified):

.XX ±.03
 .XXX ±.010