



"The best high voltage design solution"

SP7290, 3W, +3kV, SPECIFICATION SHEET



Standard Model Number : SP7290

RoHS Model Number : SP7290/Y

ELECTRICAL SPECIFICATIONS

Standard Model is NOT RoHS Compliant

Input Voltage	11.5V to 16Vdc	Programming Voltage	0 - 5Vdc
Input Current	<140mA (No Load)	Programming Current	< 100uA
Input Current	<410mA (Full Load)	Programming Linearity	<0.5% (5% to 100% Vout)
Output Voltage	0V to +3kVdc (Programmable)	Input Filter	Low ESR Capacitor
Output Current	1.0 mA	Reverse Input Protection	50Vdc
Voltage Accuracy	< 1.0%	Short Circuit Protection	Continuous
Line Regulation	< 0.05%	Switching Frequency	190 kHz
Load Regulation	<0.1%	Response Time	<400 ms (Full Load, full scale response)
Output Ripple	< 0.2% (6V P-P)	Programming Voltage Shutdown	> 5.2Vdc

GENERAL SPECIFICATIONS

Stability	< 0.01% / Hr.	Humidity	0 to 95% (Non-Condensing)
Temp. Stability	+/- 0.005%/°C	EMI/RFI	Six-Sided Shield
Temp. (Operating , Case)	-40 to +85°C	Derating	None
Temp. (Storage)	-40 to +125°C	Cooling	Free-Air Convection
Thermal Shock Limit	1°C / 10 Seconds		

PHYSICAL SPECIFICATIONS

Dimensions	1.1 x 1.75 x 0.5 inches	Encapsulation Material	UL94V-0 Epoxy
Weight	1.3 Oz	Case Material	Nickle Plated Metal

(With Non-Conductive Base Plate)

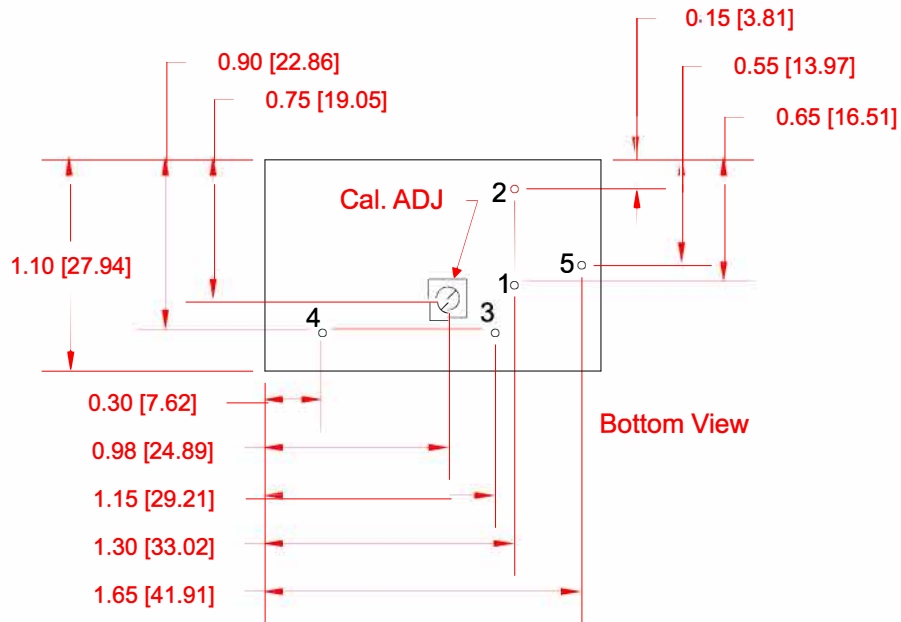


European Stocking Distributor
Phone: +41 44 730 33 53
Email: sales@hvps-condatas.com · www.hvps-condatas.com
Rietbachstrasse 7 · 8952 Schlieren (ZH) · Switzerland



"The best high voltage design solution"

SP7290, 3W, +3kV, SPECIFICATION SHEET



PIN - 0.04 [1.02] Dia.
Tin Plated Brass
Matte Finish 5 Plc

0.20 [5.08] Min. Pin Length

0.50 [12.70]

1.75 [44.45]

*Dimensions are in Inches
[Metric equivalents in brackets]*

PIN #	FUNCTION
1	+ Input
2	Gnd
3	Control / Programing Voltage
4	HV Output
5	Case Gnd



"The best high voltage design solution"

SP7290, 3W, +3kV, SPECIFICATION SHEET

APPLICATION NOTES

CLEANING AGENTS

In order to avoid possible damage, any penetration of cleaning fluids must be prevented, since the power supplies are not hermetically sealed.

NUCLEAR AND MEDICAL APPLICATIONS

American Power Design products are not designed, intended for use in, or authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of American Power Design, Inc.

TECHNICAL REVISIONS

The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

SAFETY REQUIREMENTS

The converters meet North American and International safety regulatory requirements per CAN/CSA C22.2 No 62368-1:2014 / UL 62368-1:2014 / EN62368-1:2014/A11:2017. To comply with safety agencies requirements, an input line fuse must be used external to the converter. The table below provides the recommended fuse rating for use with this family of products.

Input Voltage Range	Fuse Rating
11.5-16Vdc	1A (fast-acting)

If one input fuse is used for a group of modules, the maximum fuse rating should not exceed 10A (fast-acting).

WARRANTY

All products manufactured by American Power Design, Inc. (APD) are warranted to be free of defects due to material or workmanship for a period of one year from date of shipment. At our option, APD will repair or replace any non-conforming product.

APD expressly disclaims any liability for consequential or incidental damages resulting from the use or misuse of its products by the purchaser or others.

This warranty is in lieu of all warranties expressed or implied, including the warranties of merchantability. No other warranties, obligations, or liabilities are expressed or implied.

All products being returned for repair require a return material authorization(RMA) assigned by APD prior to return shipment.



European Stocking Distributor
Phone: +41 44 730 33 53
Email: sales@hvps-condatas.com · www.hvps-condatas.com
Rietbachstrasse 7 · 8952 Schlieren (ZH) · Switzerland