



"The best high voltage design solution"

SP7303, 10W, 0 to + or -2kV, SPECIFICATION SHEET

Customer Approval

Name _____

Signature _____

Date (MM/DD/YYYY) _____

Customer Signature Required

Standard Model Number : SP7303

RoHs Model Number : SP7303/Y

ELECTRICAL SPECIFICATIONS

Standard Model is NOT RoHs Compliant

Input Voltage 0 to 15Vdc
 Output Voltage 0V to + or -2kVdc
 Output Current 5mA
 Voltage Accuracy +/- 3% (Full Load)
 Line Regulation Proportional
 Load Regulation < +/- 35%
 Output Ripple < 1% P-P
 Start-up Voltage < 0.7Vdc
 5Vdc Input +/-5% <20 mA

Input Filter Low ESR Capacitor
 No Load Input current < 200mA
 Full Load Input current < 1000mA
 Fault Output Logic 1 (Fault Condition)
 Logic Shutdown Logic 0 (On)
 Short Circuit Protection Continuous
 Switching Frequency 125 kHz
 Output Isolation 2,500 Vdc
 Input / Output Capacitance < 60pF
 Guaranteed Start-up Load >2mA CCL
 Output Current Limit < 25mA

GENERAL SPECIFICATIONS

Temp. Stability +/- 0.02%/°C
 Temp. (Operating , Case) -25 to +85°C
 Temp. (Storage) -55 to +100°C
 Humidity 0 to 95% (Non-Condensing)

Derating None
 Cooling Free-Air Convection

PHYSICAL SPECIFICATIONS

Dimensions 1.08 x 2.19 x 0.50 inches
 Weight 3.4 Oz

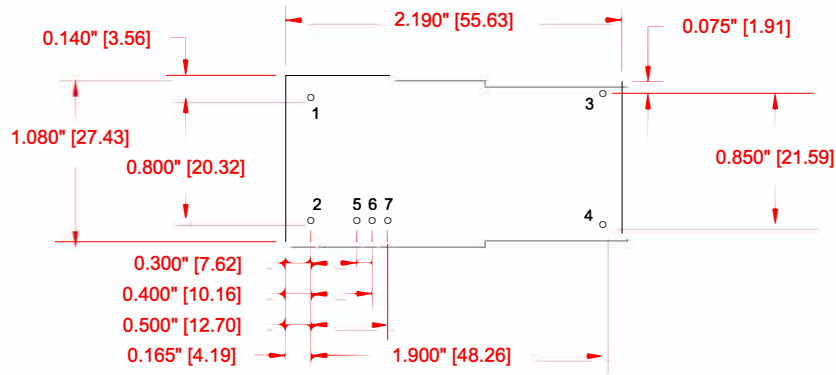
Case Material Black Metal / Phenolic



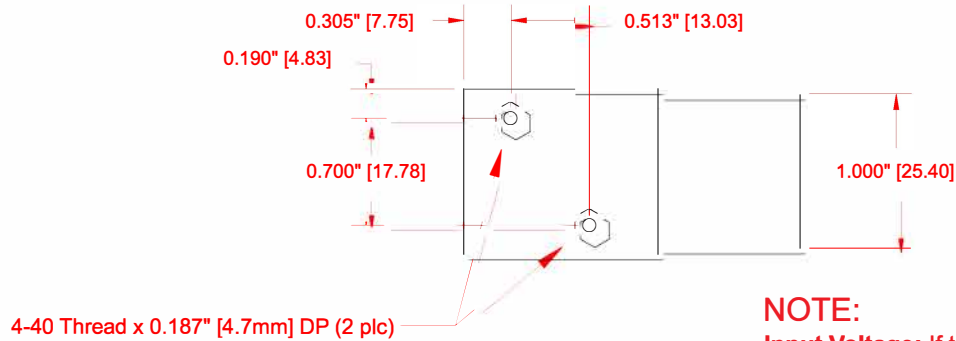
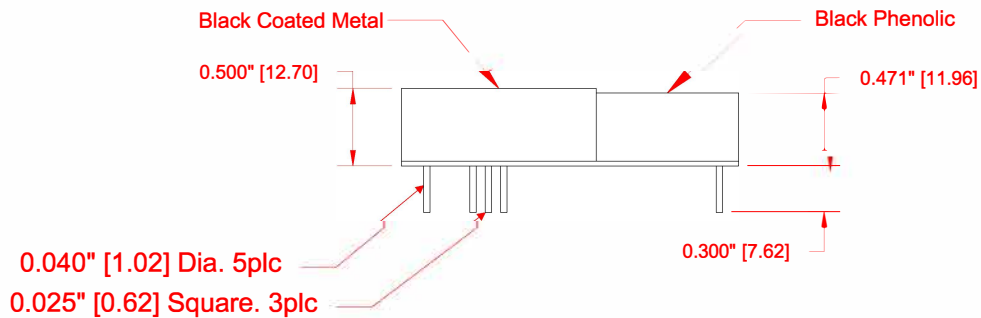


"The best high voltage design solution"

SP7303, 10W, 0 to + or -2kV, SPECIFICATION SHEET



Bottom View



NOTE:

Input Voltage: If the input voltage exceeds 16.75Vdc +/- 0.25Vdc the converter will automatically shut down and a fault signal (TTL high) will be present on the Fault Output (pin 5).

Temperature: If the temperature exceeds 90°C, the converter will automatically shut down and a fault signal (TTL high) will be present on the Fault Output (pin 5).

Reset Fault: Once the fault condition is cleared the converter will automatically restart. However, the fault signal will remain set (TTL high) until the 5V input (pin 6) is toggled low for >250ms.

PIN #	FUNCTION	PIN #	FUNCTION
1	+ Input	5	Fault Output
2	- Input	6	+5V Input
3	+ Output	7	On/Off
4	- Output		





"The best high voltage design solution"

SP7303, 10W, 0 to + or -2kV, 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.

SAFETY REQUIREMENTS

The converters are designed to meet North American and International safety regulatory requirements per UL 60950-1/CSA 22.2 No. 60950-1-07 Second Edition, IEC 60950-1:2005, and EN 60950-1:2006. Basic Insulation is provided between input and output. To comply with safety agencies requirements, an input line fuse (2A SB) must be used external to the converter.

If one input fuse is used for a group of modules, the maximum fuse rating should not exceed 20A.

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.

