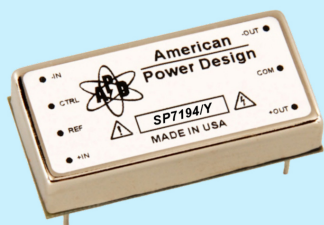




# SP7194, 5W, REGULATED, SPECIFICATION SHEET



**Standard Model Number : SP7194**

**RoHS Model Number : SP7194/Y**

## ELECTRICAL SPECIFICATIONS

*Standard Model is NOT RoHS Compliant*

|                         |                        |                                |                   |
|-------------------------|------------------------|--------------------------------|-------------------|
| Input Voltage .....     | 10V to 20Vdc           | Input Filter .....             | Low ESR Capacitor |
| Output Voltage .....    | + or -800Vdc           | Efficiency .....               | 75% (typ.)        |
| Output Current .....    | 6.2mA                  | Short Circuit Protection ..... | Continuous        |
| Voltage Accuracy .....  | <3%                    | Switching Frequency .....      | 130 kHz           |
| Line Regulation .....   | <2%                    | Output Isolation .....         | 1000Vdc           |
| Load Regulation .....   | <3% (20% to full Load) | Input/Output Capacitance ..... | < 80pF            |
| Output Ripple .....     | < 0.3% P-P             |                                |                   |
| Reference Voltage ..... | 5Vdc @ 1mA             |                                |                   |

## GENERAL SPECIFICATIONS

|                                |                           |                |                     |
|--------------------------------|---------------------------|----------------|---------------------|
| Temp. Stability .....          | +/- 0.02%/°C              | EMI/RFI .....  | Six-Sided Shield    |
| Temp. (Operating , Case) ..... | -55 to +85°C              | Derating ..... | None                |
| Temp. (Storage) .....          | -60 to +125°C             | Cooling .....  | Free-Air Convection |
| Humidity .....                 | 0 to 95% (Non-Condensing) |                |                     |
| Thermal Shock Limit .....      | 1°C / 10 Seconds          |                |                     |

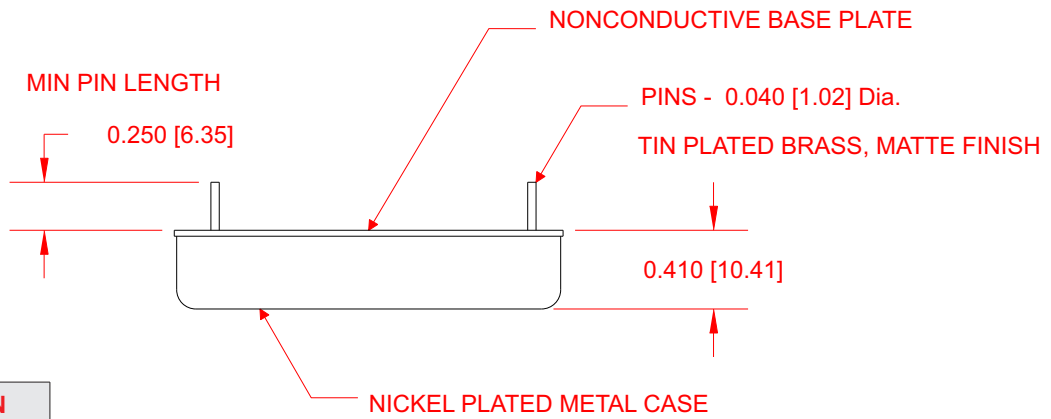
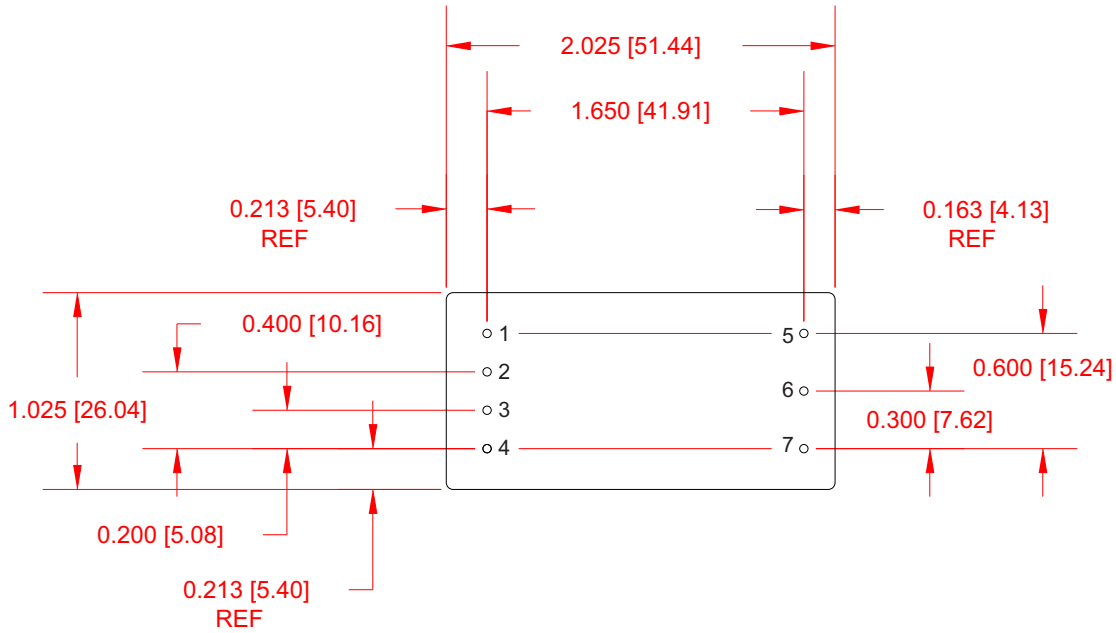
## PHYSICAL SPECIFICATIONS

|                  |                     |                     |   |
|------------------|---------------------|---------------------|---|
| Dimensions ..... | 1 x 2 x 0.41 inches | Case Material ..... | Nickel Plated Metal                     |
| Weight .....     | 1.2 Oz              |                     | <i>(With Non-Conductive Base Plate)</i> |

**REFER TO STANDARD M5 DATASHEET FOR ADDITIONAL INFORMATION**



# SP7194, 5W, REGULATED, SPECIFICATION SHEET



| PIN # | FUNCTION |
|-------|----------|
| 1     | + Input  |
| 2     | 5V Ref   |
| 3     | Control  |
| 4     | - Input  |
| 5     | + Output |
| 6     | No Pin   |
| 7     | - Output |

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

**REFER TO STANDARD M5 DATASHEET FOR ADDITIONAL INFORMATION**



# SP7194, 5W, REGULATED, 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 (1A 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.

**REFER TO STANDARD M5 DATASHEET FOR ADDITIONAL INFORMATION**