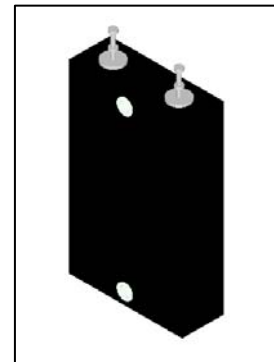


TECHNICAL DATA
DATA SHEET 564, REV. B**Transient Voltage Suppressor Module****FEATURES:**

- *Equivalent Industry Standard Part Numbers – PHP8.4 to PHP500 & PIP8.4 to PIP500
- *7,500 and 15,000 Watts Peak Pulse Power Dissipation
- *Available in ranges from 8.4 to 500 Volts
- *Each device is 100% tested
- *Designed for Military (PHP Series) and Commercial (PIP Series)



PHP / PIP is designed for applications requiring “across the line” AC power protection. These TVS modules are used in applications where extreme voltage transients can permanently damage voltage sensitive systems or components.

MAXIMUM RATINGS

Rating	Condition	Minimum	Maximum	Units
Peak Pulse Power Dissipation	@ 25°C, 1ms	-	7,500 & 15,000	Watts
Average Steady State Power Dissipation	@ 50°C	-	7.5	Watts
t_{clamping}	0 Volts to $V_{(BR)}$	-	$< 1 \times 10^{-8}$	Seconds
Operating & Storage Temp.	-	-65	+ 150	°C

Part Number	Average RMS Voltage Volts AC	Reverse Stand-Off Voltage (note 1) V_{WM} Volts DC	Minimum Breakdown Voltage $V_{(BR)}$ @ I_t Volts mA	Maximum Reverse Leakage @ V_{WM} I_D @ V_{WM} μA	Maximum Clamping Voltage V_C @ I_{PP} Volts dc	Maximum Peak Pulse Current I_{PP} Amps	Maximum Peak Pulse Power (1 msec) P_P Kilowatts
PHP8.4	8.4	12.0	14 10	250	22	341	7.5
PHP24	24.0	34.0	40 10	250	67	112	7.5
PHP30	30.0	42.5	50 1.0	250	84	90	7.5
PHP60	60.0	85.0	100 1.0	250	167	90	15.0
PHP120	120.0	170.0	200 1.0	250	319	47	15.0
PHP206	208.0	295.0	347 1.0	250	536	28	15.0
PHP250	250.0	354.0	418 1.0	250	652	23	15.0
PHP440	440.0	623.0	735 1.0	250	1138	13.2	15.0
PHP500	500.0	708.0	835 1.0	250	1292	11.6	15.0
PIP8.4	8.4	12.0	14 10	250	22	341	7.5
PIP24	24.0	34.0	40 10	250	67	112	7.5
PIP30	30.0	42.5	50 1.0	250	84	90	7.5
PIP60	60.0	85.0	100 1.0	250	167	90	15.0
PIP120	120.0	170.0	200 1.0	250	319	47	15.0
PIP206	208.0	295.0	347 1.0	250	536	28	15.0
PIP250	250.0	354.0	418 1.0	250	652	23	15.0
PIP440	440.0	623.0	735 1.0	250	1138	13.2	15.0
PIP500	500.0	708.0	835 1.0	250	1292	11.6	15.0

Special Voltages available from the factory.

Note 1: A device is normally selected according to the reverse “Stand Off Voltage” (V_{WM}) which should be equal to or greater than the DC or continuous peak operating voltage level.

TECHNICAL DATA
DATA SHEET 564, REV. B

MECHANICAL CHARACTERISTICS

CASE: Molded case.

TERMINAL: Hot solder dipped

POLARITY: Bidirectional

WEIGHT: 50 grams (Appx.)

MOUNTING POSITION: Any

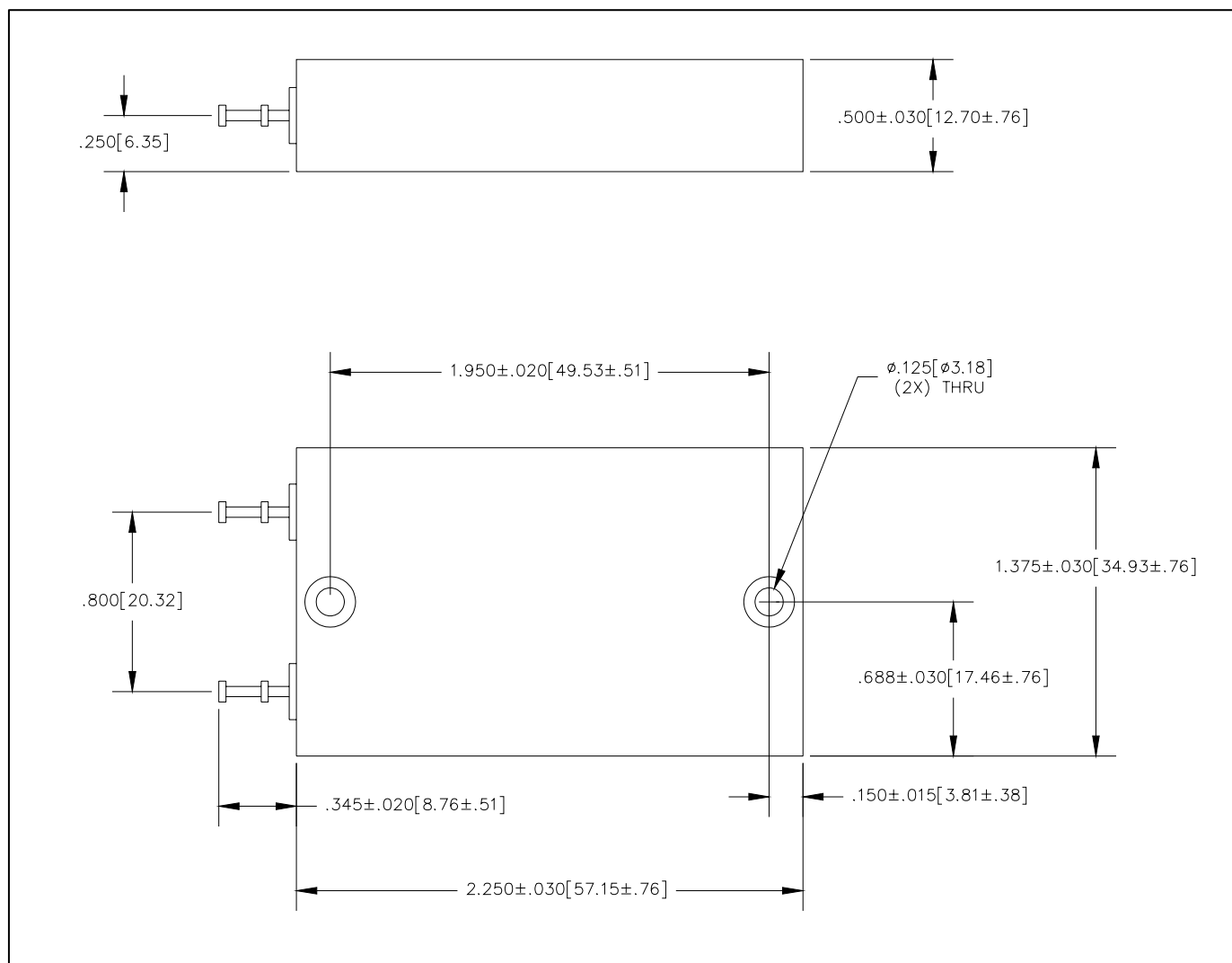
MILITARY APPLICATIONS

PHP series sub-assemblies are packaged in a hermetically sealed glass-to-metal package, available with design consistency to MIL-PRF-19500/507

COMMERCIAL APPLICATIONS

PIP series sub-assemblies are packaged in a molded epoxy case

MECHANICAL DIMENSIONS: In Inches / mm



TECHNICAL DATA
DATA SHEET 564, REV. B**DISCLAIMER:**

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.