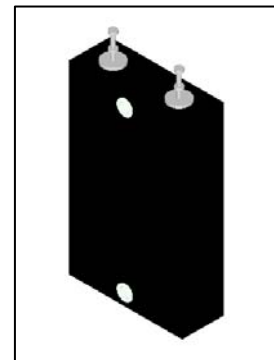


TECHNICAL DATA
DATA SHEET 564, REV. A**Transient Voltage Suppressor, Unidirectional****FEATURES:**

- ◆ 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°, 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 (I 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

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.

MOUNTING POSITION: Any

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

Technical drawing of a rectangular component with dimensions and tolerances. The drawing includes two views: a top view and a side view.

Top View Dimensions:

- Overall width: $1.950 \pm .020$ [49.53 \pm .51]
- Overall height: $1.375 \pm .030$ [34.93 \pm .76]
- Distance from left edge to center of hole: $.345 \pm .020$ [8.76 \pm .51]
- Distance from right edge to center of hole: $.150 \pm .015$ [3.81 \pm .38]
- Distance from bottom edge to center of hole: $.688 \pm .030$ [17.46 \pm .76]
- Hole diameter: $\phi .125$ [ϕ 3.18] (2X) THRU

Side View Dimensions:

- Overall height: $.500 \pm .030$ [12.70 \pm .76]
- Distance from top edge to center of hole: $.800$ [20.32]
- Distance from bottom edge to center of hole: $.250$ [6.35]

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