

2W TO 25 WATT VERTICAL MOUNT RESISTORS

PV SERIES - 2 Terminal PVH SERIES - 4 Terminal PWV SERIES - Bracket Mount



Term.W is
RoHS
compliant &
260°C
compatible



- Industry's widest range! 1mΩ-1M, to ±.05% 10ppm!
- Built-in standoffs minimize heat transfer to P.C.B.
- Available on exclusive **SWIFT™** delivery program!

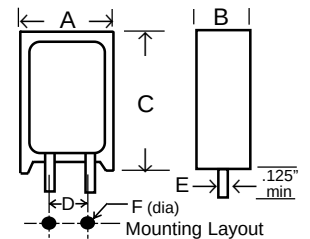
OPTIONS

- Option X - Non-Inductive
- Option WW or M (wirewound or film element)
- Option P - Increased pulse capability
- Option FF- Fuse within 10S @50x rated W (custom avail)
- Option E - Low thermal EMF design
- Option B - Increased power (refer to chart below)
- Numerous modifications avail: custom marking, TC's to +6000ppm, various lead wire sizes, burn-in, etc.

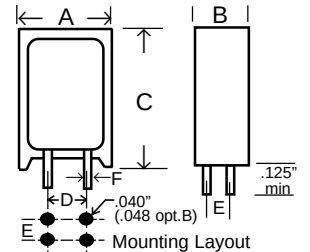
Significant space savings compared to axial-lead types!

PV, PVH, and PWV resistors are designed for power applications where space is at a premium. The PV series offers lowest cost for medium power applications. PVH series are similar except in 4-terminal Kelvin design (to cancel lead wire effect). PWV bracketed resistors enable higher power levels and superior performance in applications involving shock and vibration. The ceramic construction is fireproof and resistant to moisture & solvents. The internal element is wirewound on lower values, power film on higher values (depending on options, e.g. opt. P parts are always WW). If a specific construction is preferred, specify opt.'WW' for wirewound, opt.'M' for power film (not available in all values).

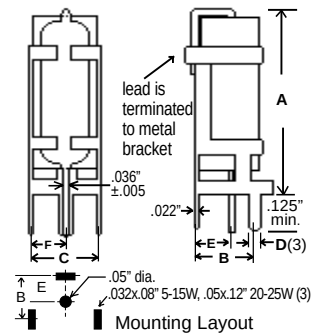
SERIES PV	Wattage Std (Opt.B)	Max. Voltage*	Max. Current*	Std Resis Range	A ±.04 [1.0]	B ±.04 [1.0]	C ±.062 [1.6]	D ±.04 [1]	E ±.005 [12]	F (Nom)
PV2	2W (3W)	80V	14A	.005Ω to 1M	.450 [11.4]	.300 [7.6]	.800 [20.3]	.197 [5]	.028 [7]	.036 [9]
PV3	3W (4W)	150V	17A	.005Ω to 1M	.475 [12.1]	.350 [8.9]	.980 [24.9]	.197 [5]	.031 [8]	.040 [1]
PV5	5W (6W)	250V	22A	.005Ω to 1M	.500 [12.7]	.360 [9.2]	1.00 [25.4]	.197 [5]	.031 [8]	.040 [1]
PV7	7W (10W)	350V	26A	.005Ω to 1M	.500 [12.7]	.400 [10]	1.52 [38.6]	.197 [5]	.031 [8]	.040 [1]
PV10	10W (12W)	500V	32A	.005Ω to 1M	.500 [12.7]	.400 [10]	2.02 [51.3]	.197 [5]	.031 [8]	.040 [1]
PV10S	10W (12W)	400V	32A	.005Ω to 1M	.625 [15.9]	.500 [12.7]	1.38 [35.0]	.290 [7.4]	.036 [9]	.048 [1.2]
PV10A	10W (12W)	400V	32A	.005Ω to 1M	.625 [15.9]	.500 [12.7]	1.38 [35.0]	.197 [5]	.036 [9]	.048 [1.2]



SERIES PVH	Wattage Std (Opt.B)	Max. Voltage*	Max Current* Std (Opt.B)	Std Resis Range	A ±.04 [1.0]	B ±.04 [1.0]	C ±.062 [1.6]	D ±.04 [1]	E ±.024 [6]	F ± .003" Std (Opt.B)
PVH2	2W (3W)	80V	14A (17A)	.001Ω to 10K	.450 [11.4]	.300 [7.6]	.800 [20.3]	.197 [5]	.075 [1.91]	.032 (.040)
PVH3	3W (5W)	150V	17A (22A)	.001Ω to 25K	.475 [12.1]	.350 [8.9]	.980 [24.9]	.197 [5]	.100 [2.54]	.032 (.040)
PVH5	5W (7W)	250V	22A (26A)	.001Ω to 30K	.500 [12.7]	.400 [10]	1.00 [25.4]	.197 [5]	.100 [2.54]	.032 (.040)
PVH7	7W (10W)	350V	26A (32A)	.001Ω to 50K	.500 [12.7]	.400 [10]	1.52 [38.6]	.197 [5]	.100 [2.54]	.032 (.040)
PVH10	10W (12W)	500V	32A (40A)	.001Ω to 250K	.500 [12.7]	.400 [10]	2.02 [51.3]	.197 [5]	.100 [2.54]	.032 (.040)
PVH10S	10W (12W)	400V	32A (40A)	.001Ω to 250K	.625 [15.9]	.500 [12.7]	1.38 [35.0]	.290 [7.4]	.125 [3.18]	.032 (.040)
PVH10A	10W (12W)	400V	32A (40A)	.001Ω to 250K	.625 [15.9]	.500 [12.7]	1.38 [35.0]	.197 [5]	.125 [3.18]	.032 (.040)



SERIES PWV	Wattage	Max. Voltage*	Max Current*	Std Resis Range	A Max	B ±.04 [1.0]	C ±.04 [1.0]	D ±.02 [0.5]	E ±.06 [1.5]	F ±.06 [1.5]
PWV5	5	200V	22A	.01Ω to 1M	1.40 [35.6]	.400 [10]	.400 [10]	.060 [1.5]	.200 [5]	.200 [5]
PWV7	7	350V	26A	.01Ω to 1M	1.86 [47.3]	.400 [10]	.400 [10]	.060 [1.5]	.200 [5]	.200 [5]
PWV10	10	500V	32A	.01Ω to 1M	2.46 [62.5]	.400 [10]	.400 [10]	.060 [1.5]	.200 [5]	.200 [5]
PWV15	15	540V	32A	.01Ω to 150K	2.46 [62.5]	.500 [12.7]	.530 [13.5]	.100 [2.5]	.265 [6.7]	.265 [6.7]
PWV20	20	600V	32A	.01Ω to 150K	3.02 [76.7]	.500 [12.7]	.580 [14.7]	.100 [2.5]	.275 [7.0]	.295 [7.5]
PWV25	25	600V	32A	.01Ω to 150K	3.02 [76.7]	.500 [12.7]	.580 [14.7]	.100 [2.5]	.275 [7.0]	.295 [7.5]



* Units not to exceed wattage, voltage, or current rating, whichever is less. Voltage determined by $E = \sqrt{PR}$, E not to exceed max voltage rating. Multiply voltage rating by 0.7 for Opt. X. Increased voltage & current ratings available (up to 1KV, 100A).

TYPICAL PERFORMANCE CHARACTERISTICS

Temp. Coef. PPM/°C (25 ~100/°C)	Res. Range	PV & PWV Std (Best)	PVH Std (Best)
	.001-.0049Ω	N/A	1200ppm (50ppm)
	.005-.0099Ω	800ppm (50ppm)	600ppm (25ppm)
	.01-.024Ω	600ppm (50ppm)	200ppm (25ppm)
	.025-.049Ω	500ppm (30ppm)	150ppm (25ppm)
	.05-.099Ω	400ppm (20ppm)	90ppm (10ppm)
	.1 - .99Ω	350ppm (20ppm)	50ppm (10ppm)
	1Ω & above	200ppm (10ppm)	20ppm (5ppm)
Operating Temp.	-55° to +220° C (275° C avail)		
Dielectric Strength	1000V		
5 Sec. overload (≤1.5x max V)	3X rated wattage (Opt. WW = 5X)		
Moisture Resistance	3.0%		
High Temp. Exposure	1.0%		
Load Life (1000 hours)	3.0%		
Opt X Inductance (reduced inductance levels avail. to 67nH)	Opt X ≤5W: ≤50Ω=2uH max, >50Ω=.37uH max Opt X ≥7W: ≤50Ω=3uH max, >50Ω=.6uH max		
Temperature Rise	125 to 220°C typ at full rated power		
Derating (W, V, A)	Derate by .513%/°C above 25° C		

P/N DESIGNATION:

RCD Type

Options: X, WW, P, M, FF, E, B
(Leave blank if standard)

Resis.Code .05%-1%: 3 signif. figures & multiplier, e.g. R001=.001Ω, R010=.01Ω, R100=.1Ω, R100=1Ω, R100=10Ω, R100=100Ω, R100=1K.
Resis.Code 2%-10%: 2 signif. figures & multiplier, e.g. R001=.001Ω, R01=0.01Ω, R10=0.1Ω, R10=1Ω, R10=10Ω, R10=100Ω, R10=1K.

Tolerance: A=0.05%, B=0.1%, C=0.25%, D=0.5%, F=1%, G=2%, J=5%(std), K=10%

Packaging: B=bulk (standard)

Optional TC: 10=10ppm, 20=20ppm, 50=50ppm, 101=100ppm, 201=200ppm, etc. (leave blank if standard)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery)

PV10 - 100 - J B W