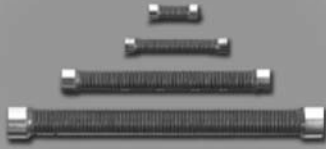


**NEW**

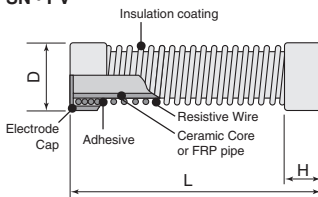


### features

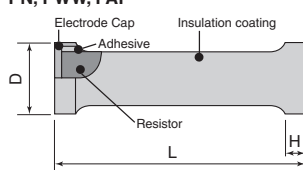
- PSN is made completely moisture preventive to be PSO
- PN is a non-inductive type and can be used for high frequency
- PWW resistors, which are non-inductive wirewound resistors for high voltage with resistance wires wound on insulation pipes
- PAP resistors are non-inductive wirewound resistors with inductance less than PWW, can be used for pulse wave measurement, impulse generators, etc. and have the same dimensions as PWW resistors

### dimensions and construction

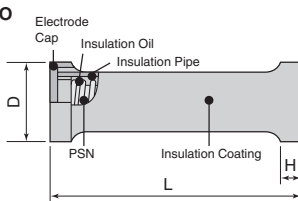
PSN • PV



PN, PWW, PAP



PSO



Size Code	Dimensions inches			Weight (g)
	L	D±0.5	H (Nominal)	
PSN-0.5	50±2	17.5	10	20
PSN-1	100±2			30
PSN-2	200±2	24	15	85
PSN-3	300±2			250
PSN-4	400±3	45	20	600
PSN-5	500±3			800
PSN-6	1000±5	62	25	1350
PV-0.5	80±2			12
PV-1	150±2	9.5	8	23
PV-2		17.5	10	45
PV-5	250±2	24	15	105
PV-8		33	20	220
PSO-0.5	55±5	28	10	120
PSO-1	105±5			150
PSO-2	205±5	38	20	370
PSO-3	320±5			760
PSO-4	420±5	65	25	1900
PSO-5	530±5			3500
PSO-6	1050±5	80	25	6200
PN-0.5	50±2			17
PN-1	100±2	12	12	
PN-2	200±2			80
PN-3	300±2	400±2	20	100
PN-4	400±2			125
PWW-3, PAP-3	300±2	33	20	310 • 250
PWW-4, PAP-4	400±3			45
PWW-5, PAP-5	500±3	62	25	1330 • 960
PWW-6, PAP-6	1000±5			2700 • 1850

**NEW**

### ordering information

New Part #	Pb free	PSN	0.5	CP	C	A	105	J	
	RoHs	PSN	0.5	CP		F	105	J	
		<b>Product Code</b>	<b>Power Rating</b>	<b>Cap*</b>	<b>Termination Material</b>	<b>RoHS</b>	<b>Holder</b>	<b>Nominal Resistance</b>	<b>Tolerance</b>
		PSN PV PSO PN PWW PAP	0.5 : 2W 1 : 5W 2 : 10W 3 : 25W 4 : 50W 5 : 125W 6 : 250W	C M MS CP	CP C:Sn/Cu (ø1.0mm) T:Sn(ø1.2mm) C, M Nil:Ni		Nil: No Holder A B	3 digits	J : ±5% K : ±10% M : ±20%

\*1: See Appendix C



KOA SPEER ELECTRONICS, INC.

# PSN, PV, PSO, PN, PWW, PAP

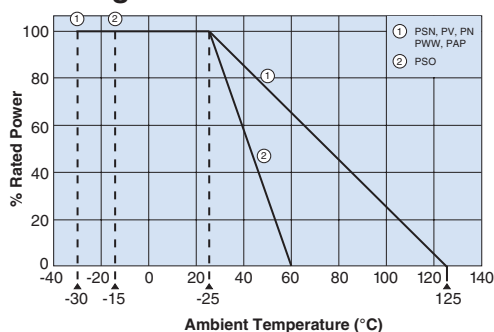
## high voltage power resistors

### applications and ratings

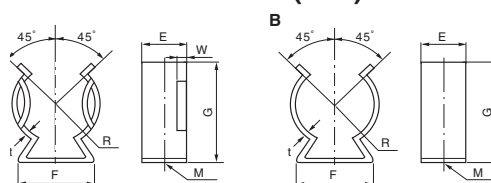
Part Designation	Power Rating (W)	Resistance Range (Ω) J: ±5% K: ±10% M: ±20% (E24)	T.C.R. (x10 <sup>-6</sup> /K)	Maximum Working Voltage	Impulse Withstand Voltage	Operating Temperature Range	Inductance (μH) Maximum	
PSN-0.5	2	500~500M	±1500: +25°C/-15°C ±1000: +25°C/+85°C (R<1GΩ)	15kV	20kV	-30°C~+125°C	—	
PSN-1	5	1k~1G		30kV	40kV			
PSN-2	10	2k~2G		60kV	80kV			
PSN-3	25	3k~3G		90kV	120kV			
PSN-4	50	4k~4G		120kV	160kV			
PSN-5	125	5k~5G		150kV	200kV			
PSN-6	250	6k~6G		300kV	400kV			
PV-0.5	2	500~500M		±3000 (R≥1GΩ)	24kV	32kV		-15°C~+60°C
PV-1	4	1k~1G			45kV	60kV		
PV-2	7	1.5k~1.5G			75kV	100kV		
PV-5	12	2.5k~2.5G			15kV	20kV		
PV-8	20	2.5k~2.5G			30kV	40kV		
PSO-0.5	1.5	500~500M	60kV		80kV			
PSO-1	4	1k~1G	90kV		120kV			
PSO-2	8	2k~2G	120kV		160kV			
PSO-3	20	3k~3G	150kV	200kV	-30°C~+125°C			
PSO-4	40	4k~4G	300kV	400kV				
PSO-5	100	5k~5G	—	20kV				
PSO-6	200	6k~6G	—	40kV				
PN-0.5	1.5	50~500k	—	80kV				
PN-1	3	100~1M	—	120kV				
PN-2	6	200~2M	—	160kV	—			
PN-3	9	300~3M	—	—				
PN-4	12	400~4M	—	—				
PWW-3	25	10~800	—	—		120kV	20	
PAP-3		10~400				3		
PWW-4	50	15~1500				160kV	35	
PAP-4		10~800			6			
PWW-5	100	25~2500			200kV	70		
PAP-5		15~1000				12		
PWW-6	200	50~5000	150					
PAP-6		25~2000	25					

### environmental applications

#### Derating Curve



### Holder Dimensions (mm)



Type	R	E	F	G	M	t	W
PSN-0.5, PSN-1, PV-2	8.5	11	16	24	ø4.2	0.8	1.5±0.5
PSN-2, PV-5	11.5	15	18	32		1.0	
PSN-3, PV-8	16	18	24	40	ø6.5	1.5	2.0±1.0
PSN-4	22	20	36	59		1.5	
PSN-5, PSN-6	30	25	46	74		1.5	

### Performance Characteristics

(PWW, PAP: Please contact factory for details)

Parameter	Requirements Δ R±%	Test Method
Resistance	Within specified tolerance	25°C
T.C.R.	Within specified T.C.R.	R<1GΩ ±1500 : +25°C/-15°C ±1000 : +25°C/+85°C R≥1GΩ ±3000 : +25°C/-15°C, +25°C/+85°C
Rapid Change of Temperature	5	-30°C (30 minutes)/+85°C (30 minutes) 5 cycles Except for PSN
Voltage Characteristics	3	Rated voltage or max. working voltage, whichever is lower and 1/10 of its voltage
Moisture Resistance	5 : R<100MΩ 10 : R≥100MΩ	40°C, 90%~95%RH, 250 hours
Endurance at 25°C	5 : R<100MΩ 10 : R≥100MΩ	25°C, 500 hours 25°C, 500 hours, Continuous load

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

12/28/08