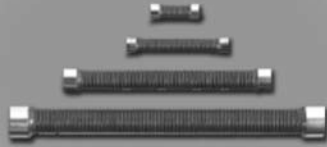


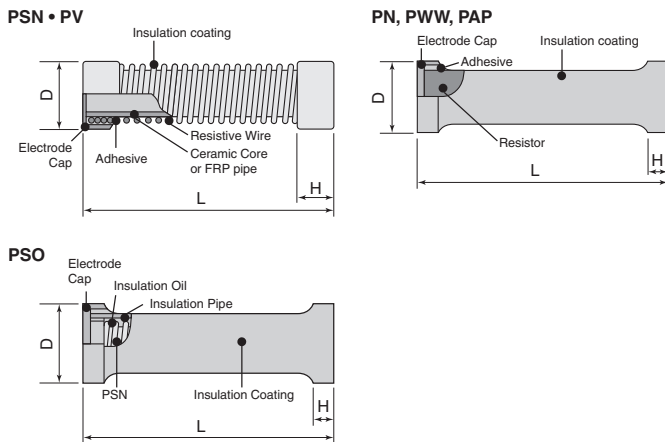
NEW



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



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	33	20	250	
PSN-4	400±3	45		600	
PSN-5	500±3	62	25	800	
PSN-6	1000±5			1350	
PV-0.5	80±2	9.5	8	12	
PV-1	150±2			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	46		760	
PSO-4	420±5	65	1900		
PSO-5	530±5	80	25	3500	
PSO-6	1050±5			6200	
PN-0.5	50±2	17	12	8	25
PN-1	100±2			55	
PN-2	200±2			80	
PN-3	300±2			100	
PN-4	400±2	33	20	125	
PWW-3, PAP-3	300±2			310 • 250	
PWW-4, PAP-4	400±3	45	660 • 510		
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	
		Product Code	Power Rating	Cap*	Termination Material	RoHS	Holder	Nominal Resistance	Tolerance
		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

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



KOA SPEER ELECTRONICS, INC.

PSN, PV, PSO, PN, PWW, PAP

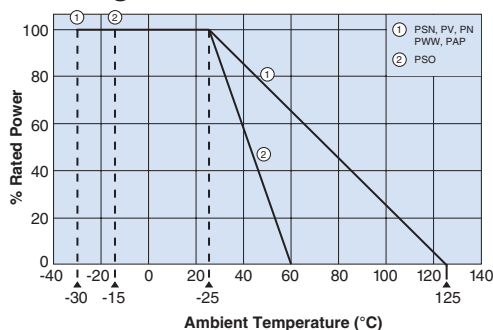
high voltage power resistors

applications and ratings

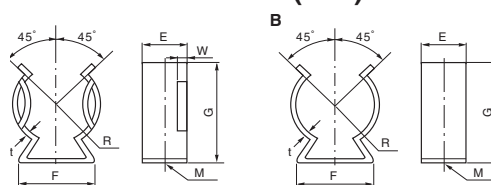
Part Designation	Power Rating (W)	Resistance Range (Ω) J: ±5% K: ±10% M: ±20% (E24)	T.C.R. ($\times 10^{-6}/K$)	Maximum Working Voltage	Impulse Withstand Voltage	Operating Temperature Range	Inductance (μH) Maximum	
PSN-0.5	2	500~500M	±1500: +25°C/-15°C ±1000: +25°C/+85°C (R<1GΩ)	15kV	20kV	-30°C~+125°C	—	
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	—	200kV				
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 $\Delta R \pm \%$	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

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