

**FEATURES**

- Resistor Values over four Decades
- Kelvin Connection
- Resistance Tolerances to  $\pm 0.1\%$
- TCR to  $\pm 2\text{ppm/K}$
- Load Stability to 0.1%

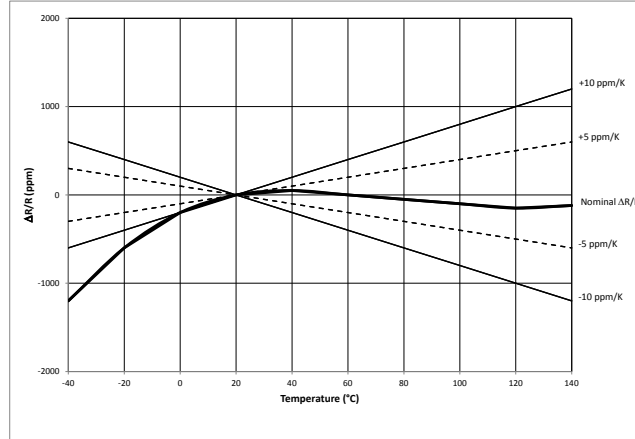


**RoHS\***  
COMPLIANT

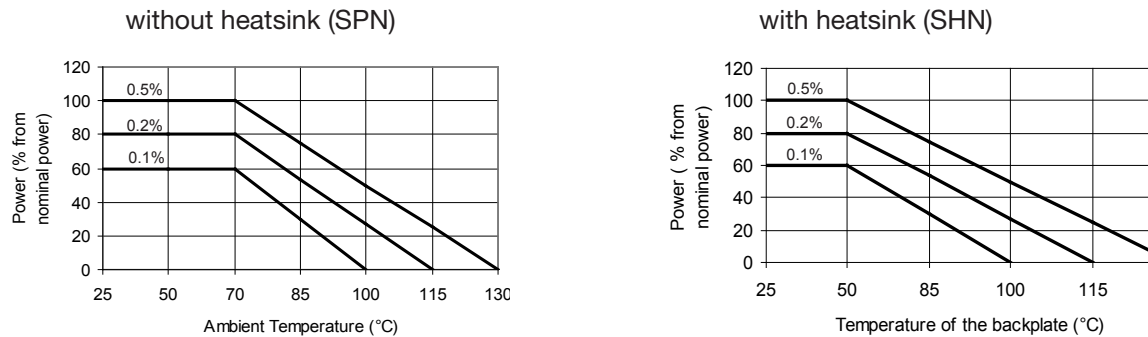
TABLE 1 – SPECIFICATIONS				
TYPE		SPN	SHN 5426 / 6819 SHN 6426 / 7819	SHN 8526
Resistance Range		0.010 to 90 Ohms		
Power Rating	Free air 70°C	2 W	2 W	3 W
	With heatsink		20 W	30 W
Tolerances		0.1% / 0.25% / 0.5% / 1%		
Stability (1000h)		0.1% / 0.2% / 0.5% (depends on stress)		
Temperature Coefficient Standard (N) Option (M) Option (L) upon request for selected values		$\pm 10\text{ppm/K}$ (20 to 60°C) $\pm 5\text{ppm/K}$ (20 to 60°C) $\pm 2\text{ppm/K}$ (20 to 60°C) other specifications upon request		
Insulation Resistance		> 10 GOhm		
Voltage Proof		> 1 kVDC		
Maximum Current		25 A		
Thermal EMF		< 1 $\mu\text{V/K}$		
Operating Temperature Range		-40 to 130°C		
Resistor Material		CuMnSn-Foil		
Substrate		Anodized aluminium		
Housing		Epoxy / anodized aluminium		
Connector Material		Cu / tinned		
Contact		K - Standard		
Max. Torque		1 Nm		

ORDERING INFORMATION
Part Number - Type - Resistance - Contact - Tolerance - TCR
SHN 4-6426 C 0R100-0R900-9R00-90R000 K 0.5% M

**FIGURE 1 – TEMPERATURE COEFFICIENT**



**FIGURE 2 – DERATING**



**FIGURE 3 – RESISTANCE COMBINATIONS**

Part	Type	Resistance Value Combination
SPN 3-4916 / SHN 3-5426 / SHN 3-6819	A	0.01 - 0.09 - 0.90 Ohms
	B	0.01 - 0.10 - 0.90 Ohms
	C	0.09 - 0.90 - 90.0 Ohms
	D	0.10 - 0.90 - 9.0 Ohms
	E	0.90 - 9.0 - 90.0 Ohms
	F	1.0 - 9.0 - 90.0 Ohms
	G	0.10 - 0.90 - 9.0 Ohms
SPN 4-5716 / SHN 4-6426 / SHN 4-7819	B	0.01 - 0.09 - 0.90 - 9.0 Ohms
	C	0.10 - 0.90 - 9.0 - 90.0 Ohms
	D	0.05 - 0.45 - 4.5 - 45.0 Ohms
	E	0.025 - 0.075 - 0.150 - 0.250 Ohms
SHN 4-8526	B	0.01 - 0.09 - 0.90 - 9.0 Ohms
SPN 5-4818	A	0.01 - 0.09 - 0.90 - 9.0 - 90.0 Ohms
	R	0.033 - 0.067 - 0.90 - 9.0 - 90.0 Ohms
SHN 6-8526	K	0.025 - 0.075 - 0.15 - 0.75 - 1.5 - 7.5 Ohms
SPN 7-6516	A	0.025 - 0.075 - 0.15 - 0.25 - 0.50 - 1.5 - 2.5 Ohms

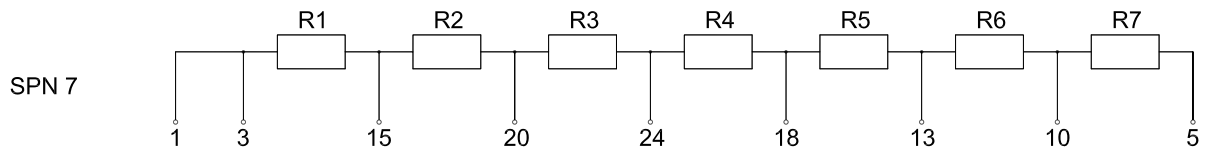
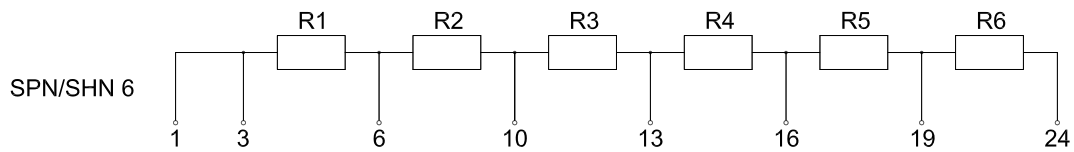
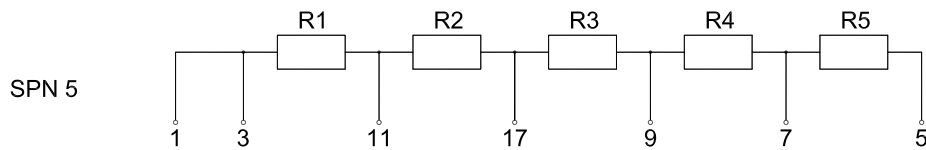
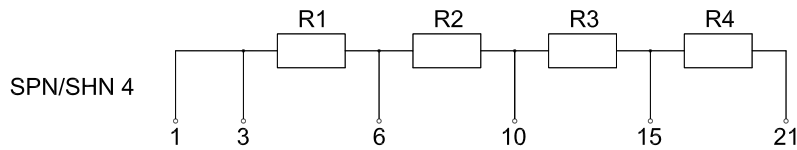
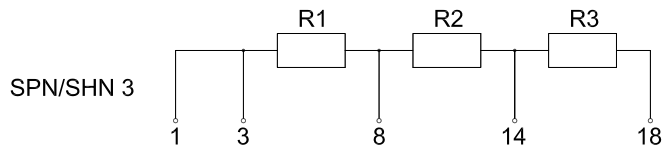
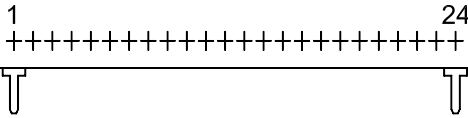
**FIGURE 4 – PATTERN**

**Pattern**

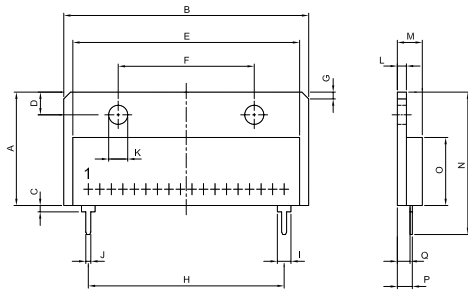
The resistor networks can be configured upon request of the customer. The only restriction is the grid of 5.08mm between two contacts.

The point of the contact can be in a grid dimension of 2.54mm.

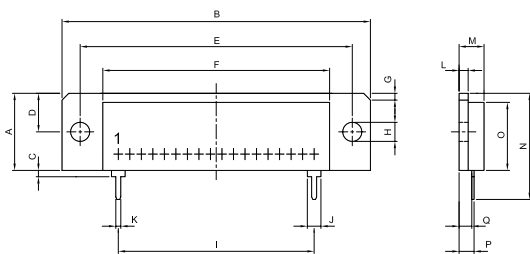
lead spacing : 0,1 inch = 2,54 mm



**FIGURE 5 – DIMENSIONS** in mm (inches)

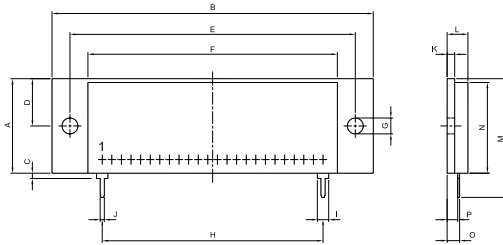


Dimension	SHN 3-5426	SHN 4-6426
A ±0.2 (±0.008)	25.00 (0.98)	
B ±0.2 (±0.008)	54.00 (2.13)	64.00 (2.52)
C ±0.4 (±0.016)	1.40 (0.06)	
D ±0.1 (±0.004)	5.00 (0.20)	
E ±0.3 (±0.012)	50.00 (1.97)	60.00 (2.36)
F ±0.2 (±0.008)	30.00 (1.18)	35.00 (1.38)
G ±0.1 (±0.004)	1.5x45° (0.6x45°)	
H ±0.3 (±0.012)	43.18 (1.70)	50.80 (2.00)
I ±0.1 (±0.004)	3.00 (0.12)	
J ±0.1 (±0.004)	1.10 (0.04)	
K ±0.1 (±0.004)	4.20 (0.17)	
L ±0.1 (±0.004)	2.00 (0.08)	
M ±0.2 (±0.008)	max.5.5 (0.22)	
N ±0.3 (±0.012)	31.40 (1.24)	
O ±0.2 (±0.008)	15.00 (0.59)	
P ±0.1 (±0.004)	3.30 (0.13)	
Q ±0.1 (±0.004)	2.80 (0.11)	

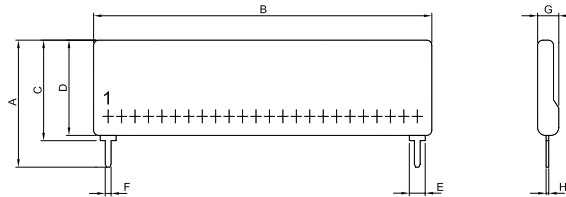


Dimension	SHN 3-6819	SHN 4-7819
A ±0.2 (±0.008)	17.00 (0.67)	
B ±0.3 (±0.012)	68.00 (2.68)	78.00 (3.07)
C ±0.4 (±0.016)	1.40 (0.06)	
D ±0.2 (±0.008)	8.50 (0.33)	
E ±0.3 (±0.012)	60.00 (2.36)	70.00 (2.76)
F ±0.2 (±0.008)	50.00 (1.97)	60.00 (2.36)
G ±0.1 (±0.004)	1.5x45° (0.6x45°)	
H ±0.1 (±0.004)	4.20 (0.17)	
I ±0.3 (±0.012)	43.18 (1.70)	50.80 (2.00)
J ±0.1 (±0.004)	3.00 (0.12)	
K ±0.1 (±0.004)	1.10 (0.04)	
L ±0.1 (±0.004)	2.00 (0.08)	
M ±0.2 (±0.008)	max. 5.5 (0.22)	
N ±0.2 (±0.008)	23.40 (0.92)	
O ±0.2 (±0.008)	15.00 (0.59)	
P ±0.1 (±0.004)	3.30 (0.13)	
Q ±0.1 (±0.004)	2.80 (0.11)	

**FIGURE 5 – DIMENSIONS** in mm (inches)



Dimension	SHN 4-8526	SHN 6-8526
A ±0.2 (±0.008)	25.00 (0.98)	
B ±0.3 (±0.012)	85.00 (3.35)	
C ±0.2 (±0.008)	1.00 (0.04)	
D ±0.2 (±0.008)	12.50 (0.49)	
E ±0.3 (±0.012)	75.50 (2.97)	
F ±0.3 (±0.012)	66.00 (2.60)	
G ±0.1 (±0.004)	4.20 (0.17)	
H ±0.3 (±0.012)	50.80 (2.00)	58.42 (2.30)
I ±0.1 (±0.004)	3.00 (0.12)	
J ±0.1 (±0.004)	1.10 (0.04)	
K ±0.1 (±0.004)	2.00 (0.08)	
L ±0.2 (±0.008)	max. 5.5 (0.22)	
M ±0.3 (±0.012)	31.00 (1.22)	
N ±0.2 (±0.008)	24.00 (0.94)	
O ±0.1 (±0.004)	3.30 (0.13)	
P ±0.1 (±0.004)	2.80 (0.11)	



Dimension	SPN 3-4916	SPN 4-5716	SPN 5-4818	SPN 7-6516
A ±0.2 (±0.008)	21.50 (0.85)		23.50 (0.93)	21.50 (0.85)
B ±0.3 (±0.012)	49.00 (1.93)	57.00 (2.24)	48.00 (1.89)	65.00 (2.56)
C ±0.2 (±0.008)	16.50 (0.65)		18.50 (0.73)	16.50 (0.65)
D ±0.2 (±0.008)	15.50 (0.61)		17.50 (0.69)	15.50 (0.61)
E ±0.1 (±0.004)	3.00 (0.12)			
F ±0.1 (±0.004)	1.10 (0.04)			
G ±0.2 (±0.008)	4.30 (0.17)			
H ±0.1 (±0.004)	0.50 (0.02)			



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