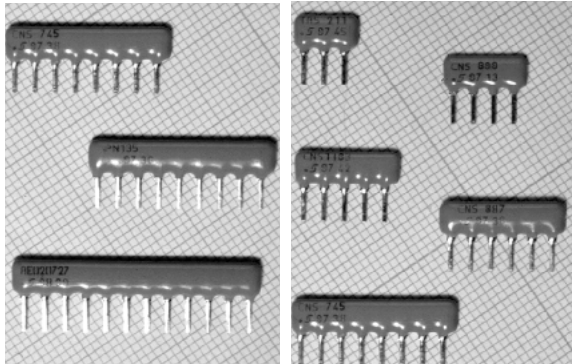




# CNS

## thin film semi custom precision resistor networks

– single in line

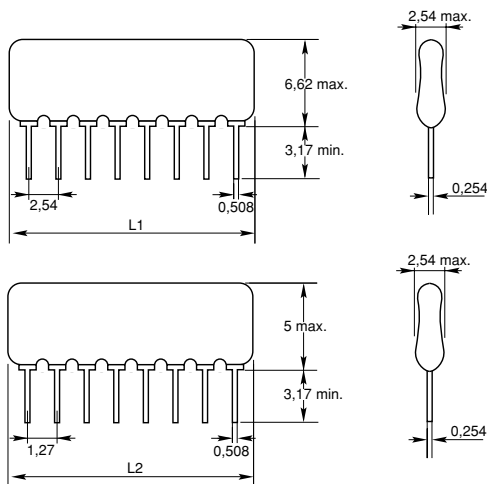


They can be delivered in a very short period of time with no NRE. A lot of different configurations are available. On a given network it is possible to get different ohmic values, the ratio between the largest and the smallest ones can be as high as 200 (or even more).

The main features of these networks are :

- **SHORT DELIVERY TIME - NO NRE**
- **HIGH VERSATILITY**
- **LOW TCR <math>\pm 15 \text{ ppm}/^\circ\text{C}</math>**
- **EXCELLENT T.C.R. TRACKING <math>< 2 \text{ ppm}/^\circ\text{C}</math>**
- **LOW NOISE <math>< -40 \text{ dB}</math>**
- **HIGH STABILITY**

### CNS

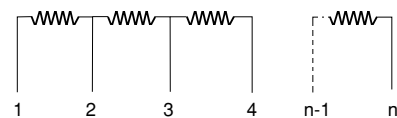


Pin count	3	4	5	6	7	8	9	10	11	12
L1 max.	8,14	10,68	13,23	15,78	18,32	20,87	23,40	25,95	28,5	31
L2 max.	5,5	6,8	8	9,3	10,6	11,9	13,2	14,4	15,7	17

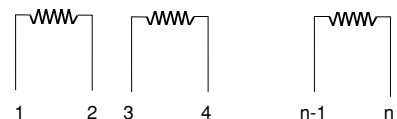
Dimensions in mm

### ELECTRICAL DIAGRAM\*

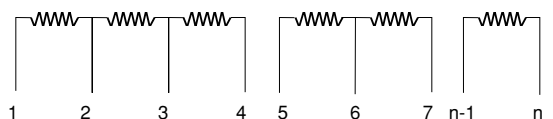
Chain of resistors



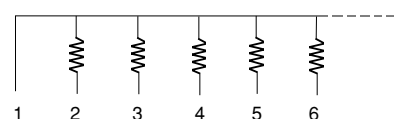
Isolated resistors



Several groups of resistors



Resistors with one common



\*Please, contact SFERNICE for other configurations.  
We should have a solution to your problem.

### SPECIFICATIONS

#### MECHANICAL

SUBSTRATE... alumina  
RESISTIVE ELEMENT... passivated nichrome  
TERMINAL LEADS... Sn Pb on Cu alloy

#### ELECTRICAL

OHMIC VALUE RANGE... from 100  $\Omega$  to 30 M $\Omega$   
ABSOLUTE TOLERANCE...  $\pm 0,1 \%$   
TOLERANCE RATIO... 0,05 %  
POWER DISSIPATION... 100 mW per resistor  
at +70 $^\circ\text{C}$   
derated to zero  
at +155 $^\circ\text{C}$   
VOLTAGE COEFFICIENT... <math>< 0,002 \text{ ppm/V}</math>  
NOISE... <math>< -35 \text{ dB}</math> typical

#### CLIMATIC

OPERATING TEMPERATURE RANGE... -55 $^\circ\text{C}$  +155 $^\circ\text{C}$

#### TEMPERATURE COEFFICIENT

	Standard	On request
ABSOLUTE	$\pm 15 \text{ ppm}/^\circ\text{C}$ max.	$\pm 5 \text{ ppm}/^\circ\text{C}$
TRACKING	<math>< 2 \text{ ppm}/^\circ\text{C}</math>	<math>< 1 \text{ ppm}/^\circ\text{C}</math>