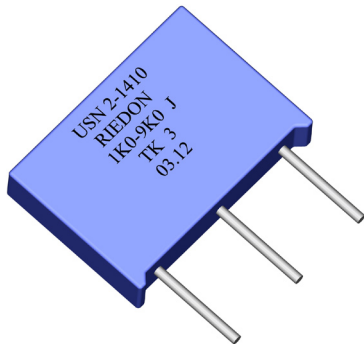


# USN 2-1410

Precision Foil Resistors



- Resistances from 10hm to 150kOhms
- Power Rating to 0.4Watt
- Resistance Tolerances to  $\pm 0.05\%$
- TCR to  $\pm 1\text{ppm/K}$
- Load Stability to 0.01%

## SPECIFICATIONS

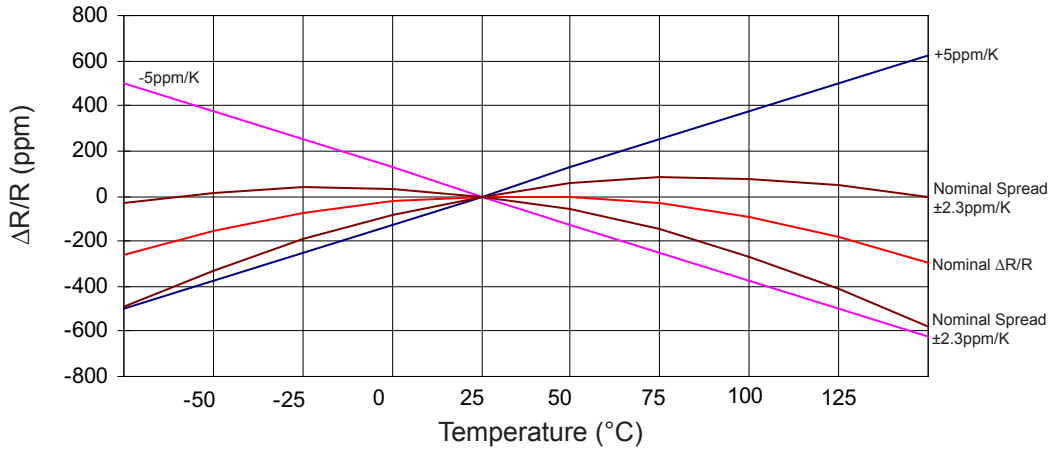
Type	USN 2-1410
Resistance Range	1.0 Ohms to 150kOhms
Variations	Double-resistor with middle-pin (R1-R2) Two single resistors (R1/R2)
Power rating (70°C)	0.4W per resistor
Tolerances	0.05% / 0.1% / 0.25% / 0.5% / 1%
Stability	0.01%
Shelf Life Stability	25ppm / $\Delta R$ after 1 year 50ppm / $\Delta R$ after 3 year
Temperature Coefficient	max. $\pm 5\text{ppm/K}$ (-55 to 155°C) typ. $\pm 3\text{ppm}$ (-55 to 125°C) upon request $\pm 1\text{ppm/K}$ (0 to 60°C) TCR-Tracking 1ppm/K upon request $< 1\text{ppm/K}$
Insulation Resistance	$> 10\text{GOhm}$
Thermal EMF	$< 0.1\mu\text{V/K}$
Operating Temperature Range	-55 to 155°C
Resistor Material	NiCr-Foil
Substrate	$\text{Al}_2\text{O}_3$
Housing	Capsule / Epoxy
Connector Material	Cu tinned
Terminals	3 (R1-R2) / 4 (R1/R2)

## Ordering Information

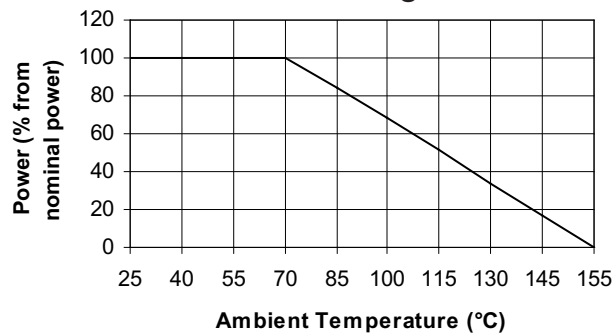
Part Number - Resistance - Contact - Tolerance - TCR  
USN 2-1410 1kOhms-9kOhms D 0.1% 5ppm Tracking 1ppm

**SPECIFICATIONS** (continued)

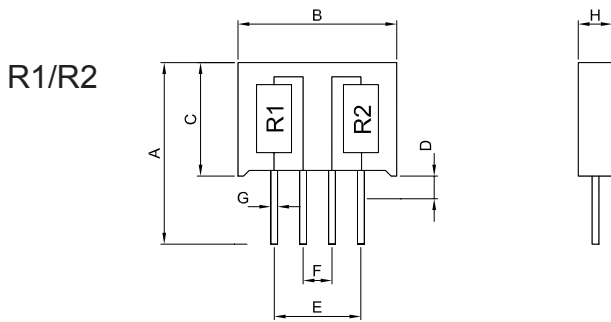
**Temperature Coefficient**



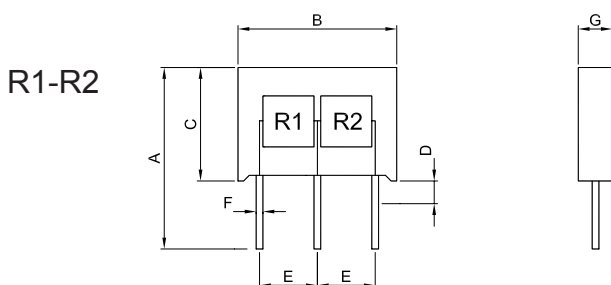
**Derating**



**Dimensions**



Dimension	mm	tol. (±mm)	inches	tol. (±inches)
A	16.00	1.0	0.63	0.039
B	14.00	0.2	0.55	0.008
C	10.00	0.2	0.39	0.008
D	2.00	0.1	0.08	0.004
E	7.62	0.1	0.30	0.004
F	2.54	0.1	0.10	0.004
G	Ø0.6	0.1	Ø0.024	0.004
H	3.00	0.1	0.12	0.004



Dimension	mm	tol. (±mm)	inches	tol. (±inches)
A	16.00	1.0	0.63	0.039
B	14.00	0.2	0.55	0.008
C	10.00	0.2	0.39	0.008
D	2.00	0.1	0.08	0.004
E	5.08	0.1	0.20	0.004
F	Ø0.6	0.1	Ø0.024	0.004
G	3.00	0.1	0.12	0.004