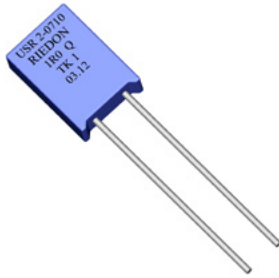


USR UNR 2-0710

Precision Foil Resistors



- Resistances from 10hm to 300kOhms
- Power Rating to 0.6Watt
- Resistance Tolerances to $\pm 0.005\%$
- TCR to $\pm 1\text{ppm/K}$
- Load Stability to 0.01%

SPECIFICATIONS

| Type | USR 2-0710 | | UNR 2-0710 |
|--|---|------------------------|--|
| Resistance Range | 1.0 Ohms to 4.99 kOhms | 5.0 kOhms to 300 kOhms | 1.0 Ohms to 5.0 kOhms |
| Power rating (70°C) | 0.4W (0.6W upon request) | 0.6W | 0.4W |
| Tolerances from 1.0 Ohms from 5.0 Ohms from 12.0 Ohms from 25.0 Ohms from 50.0 Ohms | 0.1% / 0.25% / 0.5% / 1% 0.05% / 0.1% / 0.25% / 0.5% / 1% 0.02% / 0.05% / 0.1% / 0.25% / 0.5% / 1% 0.01% / 0.02% / 0.05% / 0.1% / 0.25% / 0.5% / 1% 0.005% / 0.01% / 0.02% / 0.05% / 0.1% / 0.25% / 0.5% / 1% | | |
| Stability | 0.01% | | |
| Shelf Life Stability | 25ppm / ΔR after 1 year 50ppm / ΔR after 3 year | | |
| Temperature Coefficient | max. $\pm 5\text{ppm/K}$ (-55 to 155°C) typ. $\pm 3\text{ppm/K}$ (-55 to 125°C) upon request $\pm 1\text{ppm/K}$ (0 to 60°C) and $\pm 1\text{ppm/K}$ (-55 to 125°C) | | |
| Insulation Resistance | > 10GOhm | | |
| Thermal EMF | < 0.1 $\mu\text{V/K}$ | | |
| Operating Temperature Range | -55 to 155°C | | |
| Resistor Material | NiCr-Foil | | |
| Substrate | Al ₂ O ₃ | | AlN |
| Housing | PBTP / Epoxy | | |
| Connector Material | Cu tinned | | |
| Terminals | 2 | | |
| Notes | | | Specially designed for applications with fast changing electrical load |

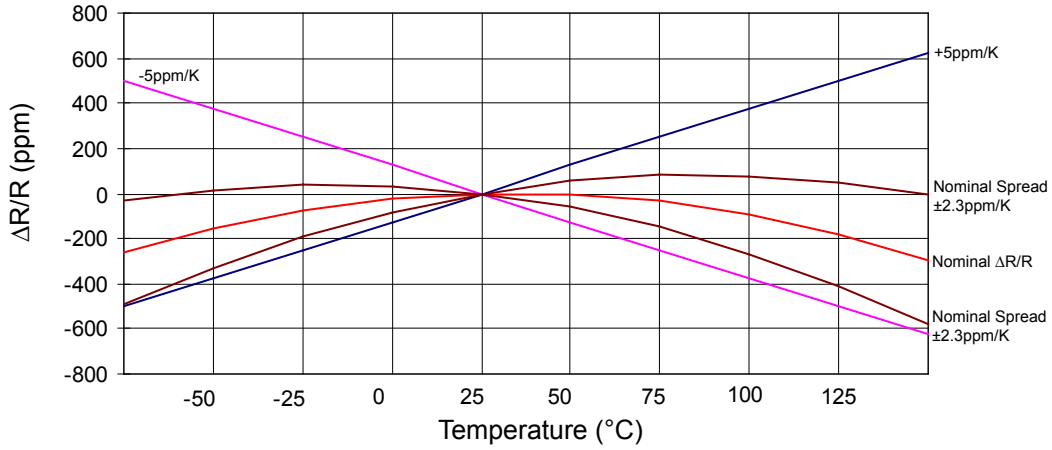
Ordering Information

Part Description: Part Type - Resistance - Contact -
Grid Type - Tolerance - TCR
Example: UNR 2-0710 3.7Ohms J 0.5% 1ppm

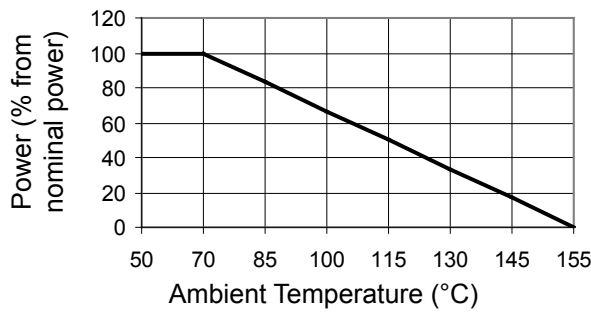
Grid (E) 3.81mm (0.15inches) = D
Grid (E) 5.08mm (0.2inches) = J

SPECIFICATIONS (continued)

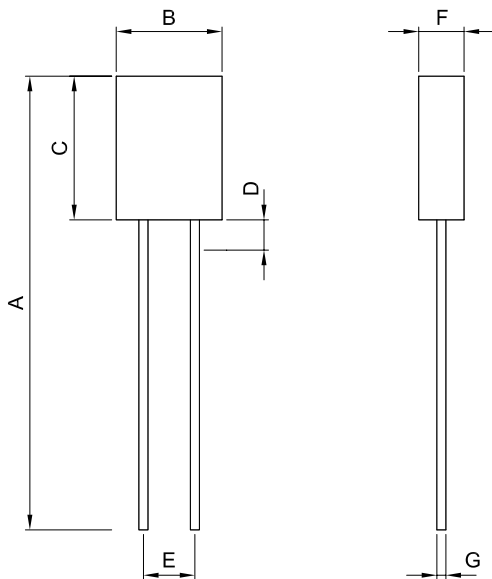
Temperature Coefficient



Derating



Dimensions



| Dimension | mm | tol. (±mm) | inches | tol. (±inches) |
|-----------|-------|------------|--------|----------------|
| A | 30.00 | 2.0 | 1.18 | 0.079 |
| B | 7.00 | 0.1 | 0.28 | 0.004 |
| C | 9.50 | 0.2 | 0.37 | 0.008 |
| D | 2.00 | 0.1 | 0.08 | 0.004 |
| E1 | 3.81 | 0.1 | 0.15 | 0.004 |
| E2 | 5.08 | 0.1 | 0.20 | 0.004 |
| F | 3.00 | 0.1 | 0.12 | 0.004 |
| G | ∅0.60 | 0.1 | ∅0.02 | 0.004 |