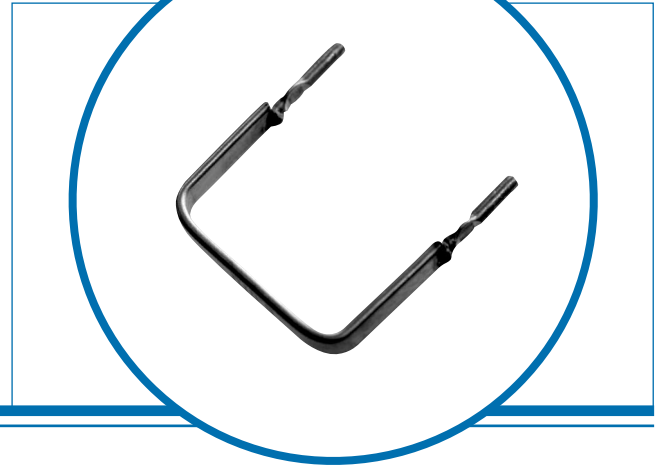


Open Air Sense Resistors

OAR Series

- 1, 3 and 5 watts
- $\pm 1\%$ or $\pm 5\%$ tolerance
- Resistance wire TCR ± 20 ppm/ $^{\circ}\text{C}$
- Resistance values down to 0R005 ohms



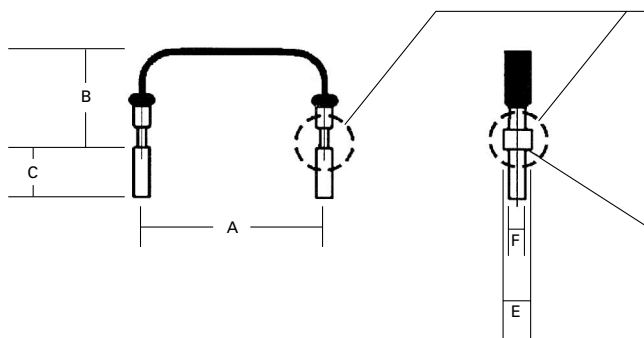
Electrical Data

| | | OAR-1 | OAR-3 | OAR-5 |
|---------------------------------------|-------|----------------|---------------|---------------|
| Power rating at 85 $^{\circ}\text{C}$ | watts | 1 | 3 | 5 |
| Resistance range | ohms | 0R005* to 0.10 | 0R005 to 0.10 | 0R005 to 0.05 |

* Contact factory for values below 0R005 ohms

Physical Data

| Dimensions (mm) | | | | | |
|-----------------|---------------------|-----------------|------------------|--------------------|------------------|
| Type | A | B | C | E | F |
| OAR-1 | 11.43 +1.020/-0.508 | 5.08 \pm 2.54 | 3.18 \pm 0.762 | 1.65 +0.254/-0.127 | 1.02 \pm 0.051 |
| OAR-3 | 15.24 +1.020/-0.50 | 25.4 max. | 3.18 \pm 0.762 | 1.65 +0.254/0.127 | 1.02 \pm 0.051 |
| OAR-5 | 20.32 +1.020/-0.50 | 25.4 max. | 3.18 \pm 0.762 | 1.65 +0.254/-0.127 | 1.02 \pm 0.051 |



On lower ranges stand-off may be eliminated

NOTE:
Contact factory for:
1. Variations of 'A' dimension
2. Different lead diameter

Test Point (Kelvin connection)

General Note

Welwyn Components reserves the right to make changes in product specification without notice or liability. All information is subject to Welwyn's own data and is considered accurate at time of going to print.

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Height Standards

All Resistances are in ohms. All Tolerances are ± 2.54 . Dimensions (mm)

| OAR-1 | |
|------------|---------------|
| Resistance | 0.005 - 0.100 |
| Height | 5.080 |

| OAR-3 | | | | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Resistance | 0.005 | 0.010 | 0.015 | 0.020 | 0.025 | 0.030 | 0.040 | 0.050 | 0.070 | 0.080 | 0.10 |
| Height | 16.002 | 16.510 | 16.510 | 17.018 | 22.098 | 22.860 | 16.002 | 18.288 | 22.860 | 21.590 | 22.860 |

| OAR-5 | | | | | |
|------------|--------|--------|--------|--------|--------|
| Resistance | 0.005 | 0.010 | 0.015 | 0.020 | 0.025 |
| Height | 15.240 | 19.304 | 19.304 | 22.860 | 22.860 |

Performance Data

| | | Maximum change |
|---|--------------|----------------|
| Load life: 1000 hrs at 25°C | $\Delta R\%$ | 1 |
| Moisture No Load 100 hrs | $\Delta R\%$ | 1 |
| Temperature Cycle at -40°C & +125°C (1000 cyc): | $\Delta R\%$ | 1 |

Features

- Welded Construction
- Flameproof
- Inductance less than 10 nanohenries
- Solderable copper leads

Applications

- Current Sensing
- Feedback
- Low inductance
- Surge and pulse

Ordering Procedure

Example: OAR3 at 10 milliohms and 5% tolerance in bulk pack -

