

# OAR Series

## Open Air Current Sense Resistors



IRC Wire and Film Technologies Division

- Power ratings of 1, 3 & 5W @ 85°C
- Resistance range from 2.5mΩ to 100mΩ
- TCRs to ±20ppm/°C
- Open air design maximizes thermal performance
- Welded copper leads minimize effects from solder wicking and provide true 1% performance



## Specifications

Part Number	Power rating @85°C (Watts)	Resistance Range (milli-ohms)	Tolerance (±%)	TCR (±ppm/°C)	Inductance (nH)
OAR-1	1.0	3, 5, 10, *20, *25, 50	1, 2 <sup>1</sup> , 5	20	<10
OAR-3	3.0	2.5, 5, 10, 15, 20, 25, *30, 50, 100			
OAR-5	5.0	3, 5, 10 *15, *20, *25, *50			

### Notes

<sup>1</sup> ±2% tolerance available; Consult factory for available tolerances at resistance values less than 5mΩ.

\* Denotes resistance values that may have longer lead times than other values listed

\* Please contact the factory for resistance values not listed

## Environmental Performance

Load life (1000 hours @25°C)	ΔR/R <1%
Moisture (no load for 1000 hours)	ΔR/R <1%
Temperature cycling (-40°C to +125°C for 1000 cycles)	ΔR/R <1%
Operating temperature	-40°C to +125°C

### General Note

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

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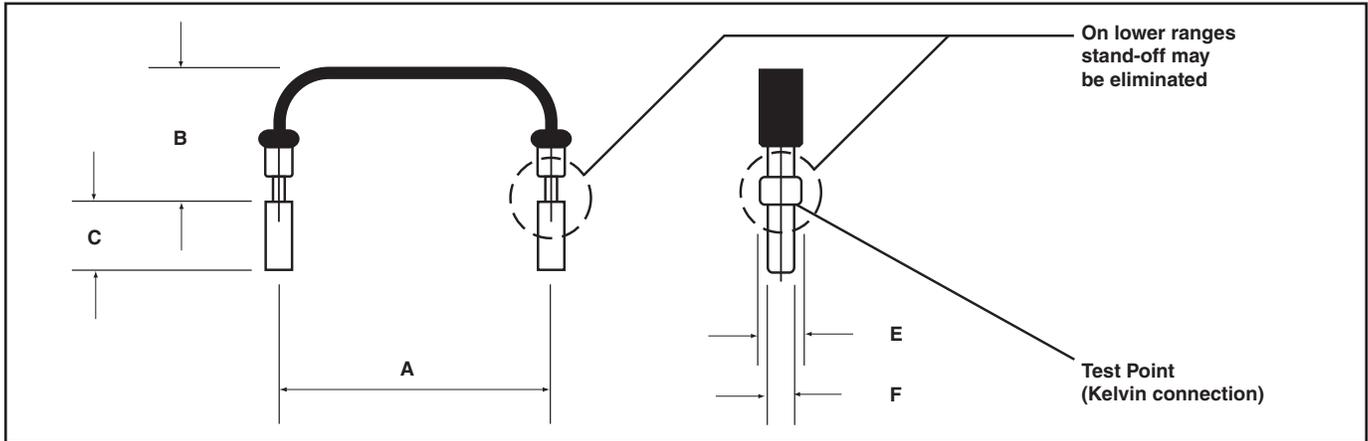
# OAR Series

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## Dimensions Inches and (mm)



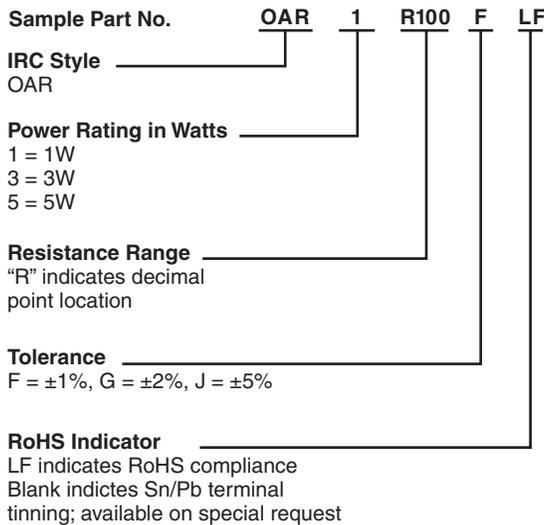
TYPE	A	B <sup>2</sup>	C <sup>3</sup>	E	F
OAR-1	0.450 +0.040/-0.20 (11.43 +1.020/-0.508)	0.200 ±0.100 (5.08 ±0.254)	0.125 ±0.030 (3.18 ±0.762)	0.065 +0.010/-0.005 (1.65 +0.254/-0.127)	0.040 ±0.002 (1.02 ±0.051)
OAR-3	0.600 +0.040/-0.20 (15.24 +1.020/-0.508)	0.600 TYPICAL - 1.00 MAX. (15.3) TYPICAL - (25.4) MAX.	0.125 ±0.030 (3.18 ±0.762)	0.065 +0.010/-0.005 (1.65 +0.254/-0.127)	0.040 ±0.002 (1.02 ±0.051)
OAR-5	0.800 +0.040/-0.20 (20.32 +1.020/-0.508)	0.600 TYPICAL - 1.00 MAX. (15.3) TYPICAL - (25.4) MAX.	0.125 ±0.030 (3.18 ±0.762)	0.065 +0.010/-0.005 (1.65 +0.254/-0.127)	0.040 ±0.002 (1.02 ±0.051)

### Notes

<sup>2</sup> Component height is a function of resistance value and alloy selection. For precise height dimensions contact factory.

<sup>3</sup> Stand-off may be eliminated on lower ohmic ranges, per customer request.

## Ordering Information



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