



#### Features

- Welded Construction
- Flameproof
- Inductance Less Than 10 Nanohenres
- Solderable Copper Leads

# Applications

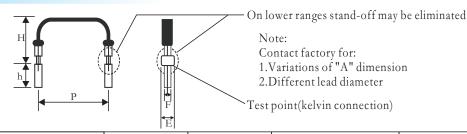
- Current Sensing
- Feedback
- Low Inductance
- Surge And Pulse

1	Tin plated Copper leads
2	Weld point
3	Resistive element
4	Stand-off

#### Construction



#### Dimensions



Туре	Р	Н	h	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	25.4max	$3.18 \pm 0.762$	1.65+0.254/-0.127	$1.02 \pm 0.051$
OAR-5	20.32+1.020/0.50	25.4max	$3.18 \pm 0.762$	1.65+0.254/-0.127	$1.02 \pm 0.051$

## Ordering Information

#### Example:

OAR-1 1 F R01 C
(1) (2) (3) (4)
Series Name Power Resistance Resistance Rating Tolerance Value TCR

- (1) Type: OAR SERIES
- (2) Power Rating: 1=1W、3=3W、5=5W
- (3) Tolerance:  $F = \pm 1\%$ ,  $G = \pm 2\%$ ,  $H = \pm 3\%$ ,  $J = \pm 5\%$ ,  $K = \pm 10\%$
- (4) Resistance Value: R10=0.01 $\Omega$ , R003=0.003 $\Omega$
- (5)TCR:  $\pm 20$ ppm/ $^{\circ}$ C

## Reference Standards

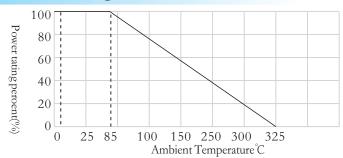
IEC 60115-1





Type	Power rating at 85°C	Resistance Value	
		MIN.	MAX.
OAR-1	1W	R003	R10
OAR-3	3W	R0025	R10
OAR-5	5W	R003	R05

# Derating Curve



### Performance Characteristics

Parameter / Performance Test & Test Method	Performance Requirements		
Power Rating (Rated Ambient Temperature )	Full power dissipation at 85°C and linearly derated to zero at $+325$ °C		
Insulation	Not Insulated		
Resistance Tolerance	±10%[K]; ±5%[J]; ±3%[H]; ±2%[G]; ±1%[F]		
Temperature Range	-55°C to+325°C with suitable derating as per derating curve above		
Voltage Rating / Limiting Voltage / Max. Working Voltage	√P x R		
Short time Overload (5 x Rated Power for 5 Secs.)	$\Delta R \pm [~0.75~\% + R0005~]$ - Average $\Delta R \pm [~1.25~\% + R0005~]$ - For resistance values near maximum range		
Temperature Co-efficient of Resistance (Measured from -55°C to +125°C referenced to +30°C)	TCR To ±20 ppm/°C [Depending on resistance value]		
Damp Heat (Steady State ) (40°C at 93 % R.H. for 1000 Hrs. – no load applied)	ΔR ± [ 0.5 % + R0005 ] – Average		
Endurance – Load Life [ 70°C with limiting voltage -1.5 hours on / 0.5 hours off for 1000 hours ]	$\Delta R \pm [\ 2.75\ \% + R0005\ ]$ -Average		
Resistance to Soldering heat - (260°C-270°C for 10 Secs)	$\Delta R \pm [0.2 \% + R0005]$ -Typical		
Solderabillity (As per IEC pub. 60068-2-20)	Must meet the requirements laid down		