

# **Model 405 Air Temperature Probe**



- 400 series nominal resistance response curve
- 2252.4 ohm Resistance @ 25 ℃ (including lead wire resistance)
- Interchangeable ±0.1 °C, 0 °C to 70 °C
- Pressed Disk Ceramic Sensor
- High sensitivity
- ¼" phone plug connector
- SS Cage protects sensor

### **DESCRIPTION**

400-series air temperature probe

### **FEATURES**

- Fast response
- Standard 400 series resistance response
- Standard ¼" phone plug connector
- Short term exposure to 150°C (except cable)
- Physically protected sensor

### **APPLICATIONS**

- Incubator temperature
- Test vessel temperature
- Laboratory room temperature
- Oven temperature
- Refrigerator temperature

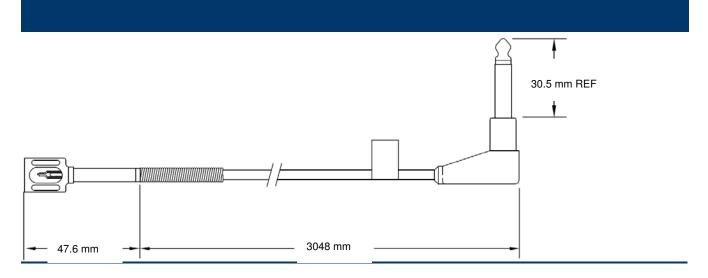
### **PERFORMANCE SPECS**

Parameter	Units	Value
Resistance @ 25 ℃ (including lead resistance)	Ohms	2252.4
Tolerance 0 ℃ to 70 ℃	<b>℃</b>	± 0.1
Beta Value 25/85	K	3976
Tolerance on Beta Value	%	0.4
Typical response time in air	Seconds	< 10
Insulation Resistance (Min. of 100Mohms for 1 Sec.)	Volts	500
Liquid immersion with 15VDC applied	Ohms	> 15Meg

### **MECHANICAL DETAILS**



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### **TYPICAL PERFORMANCE CURVES**

Temp °C	K-Ohms	Temp °C	K-Ohms	Tei
0	7.3554	25	2.2524	
1	6.9894	26	2.1564	
2	6.6444	27	2.0644	
3	6.3194	28	1.9774	
4	6.0114	29	1.8944	
5	5.7194	30	1.8154	
6	5.4444	31	1.7394	
7	5.1834	32	1.6674	
8	4.9374	33	1.5994	
9	4.7034	34	1.5334	
10	4.4824	35	1.4714	
11	4.2734	36	1.4124	
12	4.0744	37	1.3554	
13	3.8864	38	1.3014	
14	3.7084	39	1.2494	
15	3.5394	40	1.2004	
16	3.3784	41	1.1524	
17	3.2264	42	1.1074	
18	3.0814	43	1.0644	
19	2.9444	44	1.0234	
20	2.8144	45	0.9842	
21	2.6904	46	0.9466	
22	2.5724	47	0.9106	
23	2.4604	48	0.8762	
24	2.3544	49	0.8432	l
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Temp °C	K-Ohms
50	0.8117
51	0.7815
52	0.7526
53	0.7249
54	0.6983
55	0.6729
56	0.6485
57	0.6252
58	0.6028
59	0.5813
60	0.5607
61	0.5409
62	0.5219
63	0.5037
64	0.4862
65	0.4694
66	0.4533
67	0.4378
68	0.4229
69	0.4086
70	0.3949
70	0.3949



### **Model 405 Air Temperature Probe**

#### ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
081105	405 PROBE,THERM	2252.4	15

<sup>\*</sup> For quantities less than Minimum Order Quantity - contact distribution

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