

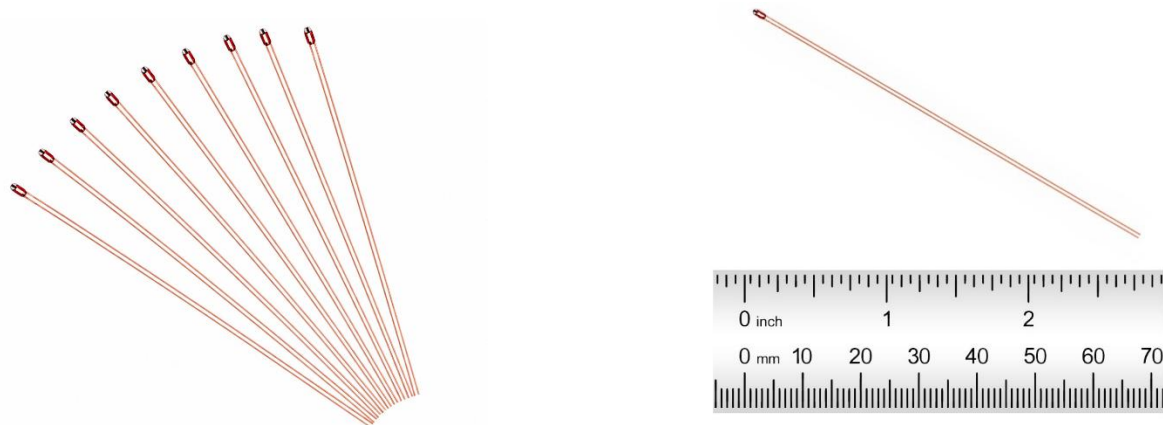


Figure 1. The Physical Photo of ATH10KR55B3950K

MAIN FEATURES

Glass Encapsulated for Long Term Stability & Reliability

High Stability: $<0.1^{\circ}\text{C}/\text{year}$

Small Size: $\phi 0.55\text{mm} \times 1.20\text{mm}$

High Resistance Accuracy: 0.5%

Quick Response Time: 1s

Wide Temp. Range: -30°C to 300°C

Leads: dumet wires (copper-clad FeNi)

100% Lead (Pb)-free and RoHS Compliant

APPLICATIONS

The ATH10KR55B3950K thermistor is ideal for temperature sensing in high-precision devices such as laser diodes and optical components that require accurate temperature monitoring. In addition, due to its low cost, it is also suitable for use in automotive electronics, industrial electronics, and home appliances where cost-effective temperature sensing is required.

DESCRIPTION

Figure 1 displays the ATH10KR55B3950K thermistor, which boasts high precision and a glass encapsulation design. In contrast to conventional epoxy-encapsulated thermistors, the ATH10KR55B3950K offers superior long-term stability and a wider temperature range. Moreover, it has a compact size and a quick response time.

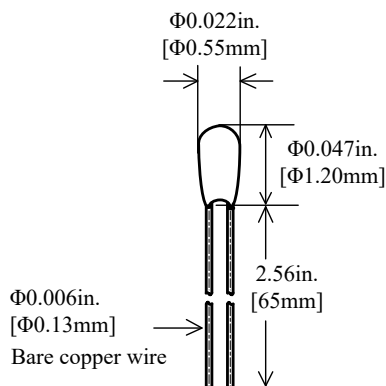


Figure 2. Side View of ATH10KR55B3950K

SPECIFICATIONS

Parameters	Symbol	Value
Nominal Resistance @ 25°C	R_{25}	$10\text{K} \pm 1\%$
B Value @ $25^{\circ}\text{C} / 50^{\circ}\text{C}$	$B_{25/50}$	$3950\text{K} \pm 1\%$
Thermistor Diameter	D_T	$0.55 \pm 0.1\text{mm}$
Thermistor Length	L_T	1.20mm
Lead Diameter	D_L	0.13mm
Lead Length	L_L	$65 \pm 5\text{mm}$
Dissipation Factor	δ_{th}	$0.25\text{mW}/^{\circ}\text{C}$
Insulation Resistance	R_{is}	$>100\text{M}\Omega$
Time Constant	τ_c	1s (in still air @ $5 \sim 25^{\circ}\text{C}$)

APPLICATION

One common issue encountered when potting the thermistor into a solid object to sense its temperature is the formation of air bubbles within the epoxy between the thermistor bead and the target object. These air bubbles can significantly delay the thermistor's response time. To address this problem, it is recommended to drill a deep counterbore hole and use thermal conductive epoxy to pot the thermistor at the bottom of the hole, as illustrated in Figure 3. This method effectively reduces the formation of air bubbles and enhances the thermistor's overall performance.

To prevent the formation of air bubbles during the potting process, it is recommended to cure the epoxy at the temperature specified by the manufacturer. For optimal results, curing should be conducted in a vacuum environment and/or on top of a vibration platform to eliminate any remaining air pockets. By taking these measures, the potting process can be optimized, resulting in accurate temperature sensing with the shortest possible response time.

The ATH10KR55B3950K thermistor is terminated with leaded bare copper wires. For applications that require insulated lead wires, we offer insulation tubing. For more information, please click [HERE](#).



The radial glass bead encapsulation NTC thermistor exhibits superior resistance to heat and climatic conditions and have a long lifetime compared to resin-coated thermistors. It is made of bonding lead wire, gold/silver electrodes and qualified ceramic thermistor chip, which makes it keep stable characteristics. It features long-term stability, reliability, wide temperature range and fast thermal response time. Multiple bead diameters and sensor spec. are available. And they can

be easily incorporated into various housing options because of their small size.

Please note that the ATH10KR55B3950K thermistor is not designed for direct immersion in water or other electrically conductive or corrosive liquids, due to the non-isolated nature of its leads. Doing so may result in inaccurate resistance readings, damage to the thermistor's leads, or pose a safety hazard.

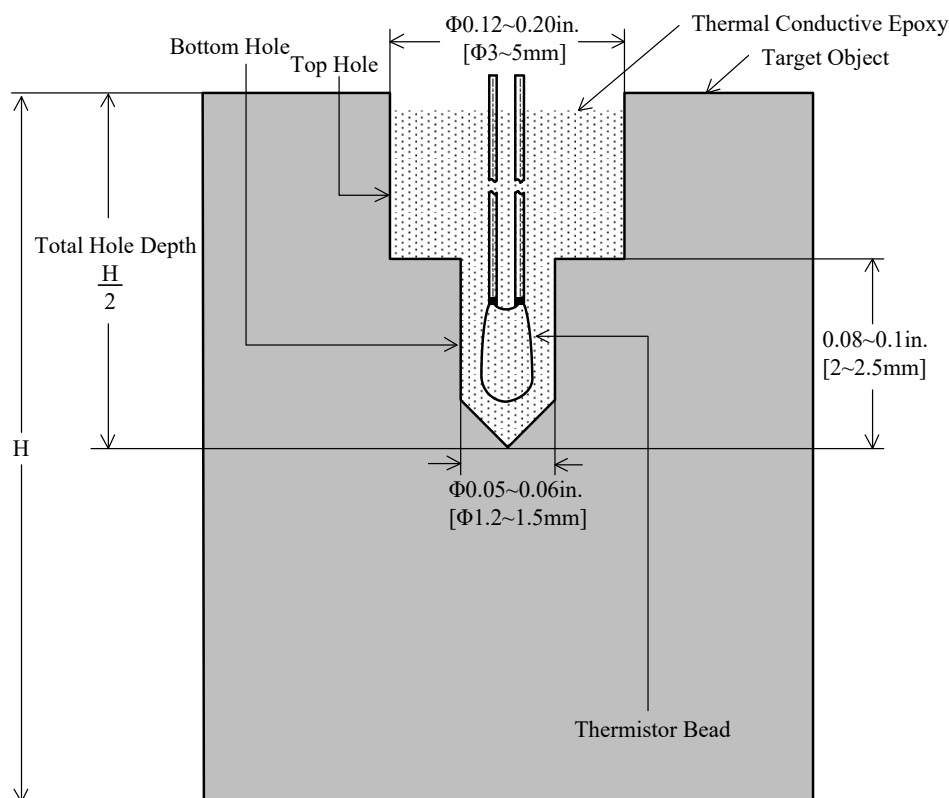


Figure 3. Section View of Recommended Counterbore Hole

PART NUMBER CONVENTION

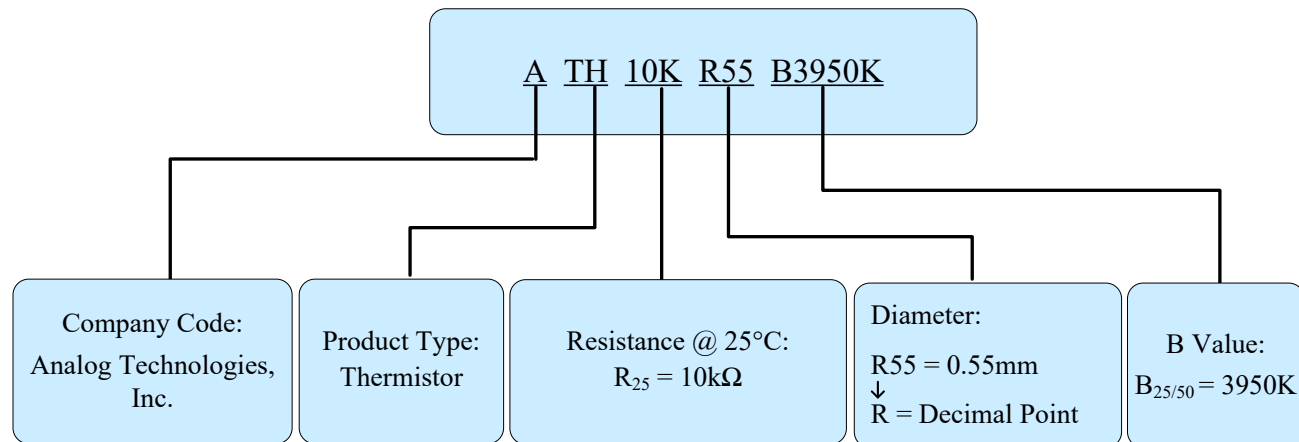


Figure 4. Part Number Convention of ATH10KR55B3950K



RESISTANCE TEMPERATURE CHARACTERISTICS

$B_{25/50} = 3950K, R_{25} = 10k\Omega, T_R = 25^\circ C, \frac{\Delta R_T}{R_T}: \pm 1\%,$						
T (°C)	Resistance (kΩ)			Relative Resistance Variation at a Specific Temperature (±%)	Temperature Measurement Error at a Specific Temperature (±°C)	Temperature Coefficient (%/°C)
	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
-30	167.132	173.756	180.625	3.88	0.33	5.99
-29	157.415	163.653	170.123	3.88	0.33	5.97
-28	148.335	154.214	160.310	3.88	0.33	5.92
-27	139.846	145.388	151.136	3.88	0.33	5.87
-26	131.906	137.134	142.555	3.88	0.33	5.83
-25	124.858	129.409	134.111	3.58	0.31	5.79
-24	117.852	122.148	126.587	3.58	0.31	5.75
-23	111.298	115.354	119.546	3.58	0.31	5.70
-22	105.156	108.988	112.949	3.58	0.32	5.66
-21	99.397	103.020	106.763	3.58	0.32	5.61
-20	94.275	97.422	100.663	3.28	0.29	5.69
-19	88.956	91.925	94.983	3.28	0.28	5.79
-18	83.980	86.783	89.670	3.28	0.29	5.74
-17	79.318	81.966	84.693	3.28	0.29	5.69
-16	74.948	77.450	80.027	3.28	0.29	5.65
-15	71.054	73.215	75.435	2.99	0.27	5.58
-14	67.238	69.283	71.384	2.99	0.27	5.50
-13	63.657	65.594	67.583	2.99	0.27	5.45
-12	60.293	62.127	64.011	2.99	0.28	5.41
-11	57.130	58.868	60.653	2.99	0.28	5.37
-10	54.305	55.803	57.335	2.71	0.25	5.39
-9	51.435	52.853	54.304	2.71	0.25	5.41
-8	48.738	50.082	51.457	2.71	0.25	5.37
-7	46.202	47.475	48.779	2.71	0.25	5.33
-6	43.815	45.022	46.259	2.71	0.26	5.29
-5	41.679	42.713	43.769	2.45	0.23	5.26
-4	39.551	40.532	41.534	2.45	0.23	5.22
-3	37.547	38.479	39.430	2.45	0.24	5.18
-2	35.659	36.544	37.447	2.45	0.24	5.14
-1	33.879	34.720	35.578	2.45	0.24	5.11
0	32.284	32.999	33.726	2.19	0.21	5.14



$$B_{25/50} = 3950K, R_{25} = 10k\Omega, T_R = 25^\circ C, \frac{\Delta R_T}{R_T}: \pm 1\%,$$

T (°C)	Resistance (kΩ)			Relative Resistance Variation at a Specific Temperature (±%)	Temperature Measurement Error at a Specific Temperature (±°C)	Temperature Coefficient (%/°C)
	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
1	30.650	31.329	32.019	2.19	0.21	5.18
2	29.111	29.756	30.412	2.19	0.21	5.14
3	27.660	28.273	28.896	2.19	0.21	5.10
4	26.291	26.873	27.466	2.19	0.22	5.06
5	25.062	25.552	26.050	1.93	0.19	4.98
6	23.862	24.330	24.804	1.93	0.20	4.89
7	22.730	23.175	23.626	1.93	0.20	4.85
8	21.658	22.082	22.512	1.93	0.20	4.81
9	20.644	21.049	21.459	1.93	0.20	4.78
10	19.733	20.070	20.411	1.69	0.17	4.83
11	18.788	19.109	19.434	1.69	0.17	4.89
12	17.896	18.202	18.511	1.69	0.17	4.85
13	17.052	17.343	17.638	1.69	0.18	4.82
14	16.253	16.531	16.812	1.69	0.18	4.78
15	15.534	15.762	15.992	1.45	0.15	4.73
16	14.823	15.041	15.260	1.45	0.16	4.67
17	14.150	14.358	14.568	1.45	0.16	4.63
18	13.512	13.711	13.911	1.45	0.16	4.60
19	12.907	13.097	13.288	1.45	0.16	4.57
20	12.361	12.514	12.668	1.22	0.13	4.55
21	11.812	11.958	12.105	1.22	0.13	4.53
22	11.291	11.431	11.571	1.22	0.14	4.50
23	10.811	10.930	11.049	1.09	0.12	4.47
24	10.345	10.454	10.563	1.04	0.12	4.44
25	9.901	10.000	10.101	1.00	0.11	4.39
26	9.476	9.576	9.676	1.04	0.12	4.33
27	9.076	9.172	9.268	1.04	0.12	4.30
28	8.688	8.787	8.886	1.13	0.13	4.28
29	8.325	8.420	8.516	1.13	0.13	4.25
30	7.973	8.071	8.170	1.22	0.14	4.24
31	7.642	7.736	7.830	1.22	0.14	4.24
32	7.326	7.416	7.507	1.22	0.14	4.21


 $B_{25/50} = 3950K, R_{25} = 10k\Omega, T_R = 25^\circ C, \frac{\Delta R_T}{R_T}: \pm 1\%,$

T (°C)	Resistance (kΩ)			Relative Resistance Variation at a Specific Temperature (±%)	Temperature Measurement Error at a Specific Temperature (±°C)	Temperature Coefficient (%/°C)
	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
33	7.025	7.112	7.198	1.22	0.15	4.18
34	6.739	6.822	6.905	1.22	0.15	4.15
35	6.452	6.545	6.639	1.43	0.17	4.17
36	6.187	6.276	6.366	1.43	0.17	4.18
37	5.934	6.020	6.106	1.43	0.17	4.15
38	5.694	5.776	5.859	1.43	0.17	4.13
39	5.464	5.543	5.623	1.43	0.17	4.10
40	5.235	5.321	5.409	1.63	0.20	4.08
41	5.026	5.109	5.193	1.63	0.20	4.06
42	4.827	4.907	4.987	1.63	0.20	4.03
43	4.637	4.714	4.791	1.63	0.20	4.00
44	4.456	4.529	4.604	1.63	0.21	3.98
45	4.274	4.353	4.433	1.83	0.23	3.95
46	4.109	4.185	4.262	1.83	0.23	3.92
47	3.952	4.025	4.099	1.83	0.23	3.90
48	3.801	3.871	3.943	1.83	0.24	3.87
49	3.657	3.725	3.794	1.83	0.24	3.85
50	3.513	3.585	3.658	2.02	0.27	3.76
51	3.386	3.455	3.526	2.02	0.28	3.66
52	3.265	3.332	3.400	2.02	0.28	3.64
53	3.148	3.213	3.278	2.02	0.28	3.62
54	3.037	3.099	3.162	2.02	0.28	3.59
55	2.925	2.990	3.057	2.21	0.30	3.64
56	2.818	2.882	2.946	2.21	0.30	3.69
57	2.717	2.778	2.840	2.21	0.30	3.66
58	2.619	2.678	2.738	2.21	0.30	3.64
59	2.526	2.583	2.640	2.21	0.31	3.62
60	2.432	2.491	2.551	2.40	0.33	3.58
61	2.347	2.404	2.462	2.40	0.34	3.54
62	2.266	2.321	2.377	2.40	0.34	3.52
63	2.188	2.241	2.295	2.40	0.34	3.50
64	2.113	2.164	2.216	2.40	0.34	3.48


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	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
65	2.037	2.090	2.144	2.57	0.36	3.53
66	1.965	2.016	2.069	2.57	0.36	3.59
67	1.896	1.946	1.996	2.57	0.36	3.56
68	1.830	1.878	1.927	2.57	0.36	3.54
69	1.767	1.813	1.860	2.57	0.37	3.52
70	1.703	1.750	1.799	2.75	0.40	3.44
71	1.646	1.692	1.739	2.75	0.41	3.36
72	1.592	1.637	1.682	2.75	0.41	3.33
73	1.540	1.583	1.627	2.75	0.41	3.32
74	1.490	1.532	1.574	2.75	0.42	3.30
75	1.439	1.482	1.526	2.92	0.44	3.29
76	1.393	1.434	1.476	2.92	0.44	3.29
77	1.348	1.388	1.429	2.91	0.45	3.27
78	1.304	1.343	1.383	2.92	0.45	3.25
79	1.263	1.300	1.339	2.91	0.45	3.23
80	1.221	1.259	1.298	3.08	0.48	3.23
81	1.182	1.219	1.257	3.08	0.48	3.22
82	1.145	1.180	1.217	3.08	0.48	3.21
83	1.109	1.143	1.179	3.08	0.48	3.19
84	1.074	1.108	1.142	3.07	0.48	3.17
85	1.039	1.073	1.108	3.24	0.51	3.15
86	1.007	1.040	1.074	3.24	0.52	3.13
87	0.976	1.008	1.041	3.24	0.52	3.11
88	0.946	0.977	1.009	3.24	0.52	3.09
89	0.917	0.948	0.979	3.24	0.53	3.07
90	0.888	0.919	0.951	3.39	0.56	3.04
91	0.862	0.892	0.923	3.40	0.57	3.00
92	0.837	0.866	0.895	3.40	0.57	2.98
93	0.812	0.840	0.869	3.40	0.57	2.97
94	0.788	0.816	0.844	3.40	0.58	2.95
95	0.764	0.792	0.821	3.55	0.60	2.95
96	0.742	0.769	0.797	3.55	0.60	2.96



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	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
97	0.720	0.747	0.773	3.55	0.60	2.94
98	0.700	0.725	0.751	3.55	0.61	2.92
99	0.680	0.704	0.730	3.55	0.61	2.90
100	0.659	0.684	0.710	3.70	0.67	2.76
101	0.642	0.666	0.691	3.69	0.71	2.61
102	0.626	0.649	0.674	3.70	0.71	2.60
103	0.610	0.633	0.656	3.70	0.72	2.58
104	0.594	0.617	0.640	3.69	0.72	2.56
105	0.578	0.601	0.625	3.84	0.71	2.70
106	0.562	0.584	0.607	3.83	0.67	2.84
107	0.547	0.568	0.590	3.83	0.68	2.83
108	0.531	0.552	0.574	3.83	0.68	2.82
109	0.517	0.537	0.558	3.84	0.69	2.79
110	0.502	0.522	0.543	3.98	0.74	2.69
111	0.489	0.509	0.529	3.98	0.77	2.60
112	0.476	0.496	0.516	3.99	0.77	2.58
113	0.464	0.483	0.503	3.98	0.77	2.57
114	0.452	0.471	0.490	3.98	0.78	2.55
115	0.441	0.459	0.478	4.11	0.78	2.64
116	0.429	0.447	0.465	4.11	0.75	2.73
117	0.417	0.435	0.453	4.11	0.76	2.72
118	0.406	0.423	0.441	4.10	0.76	2.70
119	0.395	0.412	0.429	4.10	0.77	2.67
120	0.384	0.401	0.418	4.24	0.78	2.71
121	0.374	0.390	0.407	4.26	0.78	2.74
122	0.364	0.380	0.396	4.24	0.78	2.73
123	0.354	0.369	0.385	4.25	0.78	2.72
124	0.345	0.360	0.375	4.24	0.79	2.70
125	0.335	0.350	0.366	4.37	0.85	2.57
126	0.327	0.342	0.357	4.36	0.89	2.46
127	0.319	0.333	0.348	4.35	0.90	2.43
128	0.311	0.325	0.340	4.37	0.90	2.41


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	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
129	0.304	0.318	0.332	4.36	0.91	2.41
130	0.296	0.310	0.324	4.50	0.92	2.45
131	0.289	0.302	0.316	4.52	0.90	2.50
132	0.282	0.295	0.308	4.49	0.91	2.48
133	0.275	0.288	0.301	4.50	0.91	2.47
134	0.268	0.281	0.294	4.51	0.92	2.44
135	0.262	0.274	0.287	4.62	0.94	2.46
136	0.255	0.267	0.280	4.60	0.92	2.51
137	0.249	0.261	0.273	4.60	0.92	2.49
138	0.243	0.254	0.266	4.62	0.93	2.48
139	0.237	0.248	0.260	4.62	0.94	2.46
140	0.231	0.242	0.254	4.75	0.97	2.44
141	0.225	0.236	0.248	4.74	0.99	2.39
142	0.220	0.231	0.242	4.72	1.00	2.36
143	0.215	0.225	0.236	4.75	1.01	2.35
144	0.210	0.220	0.231	4.75	1.01	2.34
145	0.205	0.215	0.226	4.84	1.04	2.33
146	0.200	0.210	0.221	4.85	1.06	2.28
147	0.196	0.205	0.216	4.87	1.08	2.26
148	0.191	0.201	0.211	4.83	1.07	2.27
149	0.187	0.196	0.206	4.84	1.08	2.24
150	0.183	0.192	0.202	4.95	1.17	2.11
151	0.179	0.188	0.198	4.94	1.24	1.99
152	0.176	0.185	0.194	4.93	1.25	1.98
153	0.172	0.181	0.190	4.98	1.27	1.96
154	0.169	0.177	0.186	4.96	1.28	1.94
155	0.165	0.174	0.183	5.09	1.23	2.07
156	0.162	0.170	0.179	5.08	1.15	2.20
157	0.158	0.167	0.175	5.08	1.16	2.19
158	0.155	0.163	0.171	5.06	1.16	2.18
159	0.152	0.159	0.168	5.08	1.17	2.16
160	0.148	0.156	0.164	5.19	1.27	2.05



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	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
161	0.145	0.153	0.161	5.16	1.36	1.90
162	0.143	0.150	0.158	5.19	1.39	1.86
163	0.140	0.147	0.155	5.16	1.36	1.90
164	0.137	0.145	0.152	5.19	1.39	1.87
165	0.135	0.142	0.150	5.25	1.26	2.08
166	0.132	0.139	0.146	5.23	1.13	2.31
167	0.129	0.136	0.143	5.27	1.17	2.25
168	0.126	0.133	0.140	5.24	1.16	2.26
169	0.123	0.130	0.137	5.29	1.18	2.24
170	0.120	0.127	0.134	5.40	1.25	2.17
171	0.118	0.124	0.131	5.44	1.25	2.18
172	0.115	0.121	0.128	5.40	1.26	2.14
173	0.113	0.119	0.126	5.42	1.29	2.10
174	0.110	0.116	0.123	5.41	1.29	2.10
175	0.108	0.114	0.121	5.48	1.36	2.02
176	0.106	0.112	0.118	5.46	1.42	1.92
177	0.104	0.110	0.116	5.47	1.43	1.91
178	0.102	0.108	0.114	5.48	1.44	1.91
179	0.100	0.106	0.112	5.49	1.49	1.85
180	0.098	0.104	0.110	5.54	1.44	1.93
181	0.096	0.102	0.107	5.51	1.37	2.02
182	0.094	0.100	0.105	5.52	1.41	1.96
183	0.092	0.098	0.103	5.53	1.42	1.94
184	0.091	0.096	0.101	5.53	1.43	1.93
185	0.089	0.094	0.099	5.64	1.47	1.91
186	0.087	0.092	0.098	5.64	1.44	1.95
187	0.085	0.090	0.096	5.64	1.46	1.94
188	0.084	0.089	0.094	5.64	1.52	1.86
189	0.082	0.087	0.092	5.63	1.53	1.84
190	0.081	0.086	0.091	5.79	1.55	1.87
191	0.079	0.084	0.089	5.78	1.52	1.91
192	0.078	0.082	0.087	5.77	1.53	1.88


 $B_{25/50} = 3950K, R_{25} = 10k\Omega, T_R = 25^\circ C, \frac{\Delta R_T}{R_T}: \pm 1\%,$

T (°C)	Resistance (kΩ)			Relative Resistance Variation at a Specific Temperature (±%)	Temperature Measurement Error at a Specific Temperature (±°C)	Temperature Coefficient (%/°C)
	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
193	0.076	0.081	0.086	5.75	1.60	1.79
194	0.075	0.079	0.084	5.73	1.63	1.76
195	0.074	0.078	0.083	5.83	1.52	1.92
196	0.072	0.076	0.081	5.89	1.50	1.96
197	0.071	0.075	0.080	5.87	1.52	1.93
198	0.069	0.074	0.078	5.85	1.48	1.97
199	0.068	0.072	0.077	5.83	1.56	1.87
200	0.067	0.071	0.075	5.86	1.80	1.62
201	0.066	0.070	0.074	5.80	2.03	1.43
202	0.065	0.069	0.073	5.89	2.03	1.45
203	0.064	0.068	0.072	5.83	2.08	1.40
204	0.063	0.067	0.071	5.90	2.19	1.35
205	0.062	0.066	0.070	5.98	1.98	1.52
206	0.061	0.065	0.069	5.93	1.83	1.62
207	0.060	0.064	0.068	5.95	1.90	1.56
208	0.059	0.063	0.067	5.96	1.88	1.59
209	0.058	0.062	0.066	5.90	1.92	1.53
210	0.057	0.061	0.065	6.07	1.68	1.80
211	0.056	0.060	0.063	6.03	1.44	2.09
212	0.055	0.059	0.062	5.98	1.46	2.05
213	0.054	0.057	0.061	6.02	1.44	2.09
214	0.053	0.056	0.060	6.06	1.48	2.05
215	0.052	0.055	0.058	6.09	1.68	1.82
216	0.051	0.054	0.057	6.10	1.94	1.57
217	0.050	0.053	0.057	6.10	2.03	1.50
218	0.049	0.053	0.056	6.10	2.00	1.52
219	0.049	0.052	0.055	6.09	2.10	1.45
220	0.048	0.051	0.054	6.18	1.97	1.57
221	0.047	0.050	0.053	6.19	1.82	1.70
222	0.046	0.049	0.052	6.09	1.88	1.62
223	0.046	0.049	0.052	6.19	1.88	1.65
224	0.045	0.048	0.051	6.08	1.93	1.57



$B_{25/50} = 3950K, R_{25} = 10k\Omega, T_R = 25^\circ C, \frac{\Delta R_T}{R_T}: \pm 1\%,$						
T (°C)	Resistance (kΩ)			Relative Resistance Variation at a Specific Temperature (±%)	Temperature Measurement Error at a Specific Temperature (±°C)	Temperature Coefficient (%/°C)
	Minimum	Nominal	Maximum	$\frac{\Delta R_T}{R_T}$	$\Delta T_N = \frac{\Delta R_N}{R_{N+1} - R_{N-1}}$	$\alpha = \frac{R_{N-1} - R_{N+1}}{2 \times R_N}$
225	0.044	0.047	0.050	6.17	1.81	1.70
226	0.043	0.046	0.049	6.29	1.71	1.84
227	0.043	0.045	0.048	6.18	1.75	1.77
228	0.042	0.045	0.047	6.29	1.75	1.80
229	0.041	0.044	0.046	6.18	1.80	1.72
230	0.040	0.043	0.046	6.28	1.80	1.75

To ensure optimal performance and reliability, it is recommended to follow proper storage procedures for the ATH10KR55B3950K thermistor. Here are some guidelines:

1. Store the thermistors only in their original packaging and do not open the package before storage.
2. The recommended storage temperature is between $-25^\circ C$ to $+45^\circ C$, with a relative humidity of less than 75% on average and a maximum of 95%. Dew precipitation is not allowed.
3. Do not expose the thermistors to heat or direct sunlight during storage as this may cause deformation of the packing material or sticking of the thermistors, leading to difficulties during mounting.
4. Avoid contamination of the thermistor's surface during storage, handling, and processing.
5. Do not store the thermistor in harmful environments containing corrosive gases like SOx, Cl, etc.
6. After opening the factory seals, such as polyvinyl-sealed packages, it is recommended to use the thermistors as soon as possible.
7. For optimal soldering performance, it is recommended to solder the thermistors within 12 months for SMDs and 24 months for leaded components after shipment from the manufacturer, ATI.

When handling NTC thermistors, it is important to prevent them from being dropped, as this could cause chip-offs and damage to the components. To avoid any damage, components should not be touched with bare hands, and gloves are recommended. It is also important to prevent any contamination of the thermistor surface during handling to ensure accurate readings.

When soldering the ATH10KR55B3950K thermistor, it is important to use a resin-type or non-activated flux. Insufficient preheating can cause ceramic cracks, so proper preheating is recommended. Rapid cooling by dipping in solvent is not recommended. It is also recommended to completely remove any flux residue after soldering to prevent contamination or damage to the thermistor.

ORDERING INFORMATION

Part Number	Buy Now
ATH10KR55B3950K	 *

NOTICE

1. It is important to carefully read and follow the warnings, cautions, and product-specific notes provided with electronic components. These instructions are designed to ensure the safe and proper use of the component and to prevent damage to the component or surrounding equipment. Failure to follow these instructions could result in malfunction or failure of the component, damage to surrounding equipment, or even injury or harm to individuals. Always take the necessary precautions and seek professional assistance if unsure about proper use or handling of electronic components.



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