

MODEL TR91 RoHS THERMISTOR SENSOR PROBES

Thermistor is a generic term describing a semiconductor device that exhibits an electrical conductivity that is highly sensitive to temperature. The name was derived from the words, thermally sensitive resistor. These devices may be either *positive temperature coefficient (PTC)* or *negative temperature coefficient (NTC)* with respect to their resistance characteristics with temperature.

Oven Industries' Model TR91 RoHS Thermistor sensors have an NTC type resistance versus temperature characteristic. In addition, they have a matched resistance versus temperature curve and are interchangeable from one Thermistor to another per the specified tolerance. **Custom wire length are available.**

Thermistor Specifications:

Base Resistance At 25°C: 10,000Ω
 Interchangeable Tolerance: ±1.0°C over a 0°C to 100°C Temperature range

TEMPERATURE (°C) VS. RESISTANCE (Ω) CHART

-40	336,600	-12	61,760	16	15,000	44	4,544	72	1,637	100	679.2	128	316.2
-39	315,000	-11	58,460	17	14,320	45	4,368	73	1,582	101	659.6	129	308.2
-38	295,000	-10	55,340	18	13,680	46	4,202	74	1,530	102	640.8	130	300.6
-37	275,400	-9	52,420	19	13,070	47	4,042	75	1,480	103	622.6	131	293.0
-36	259,000	-8	49,660	20	12,490	48	3,888	76	1,432	104	605.0	132	285.8
-35	242,800	-7	47,080	21	11,940	49	3,742	77	1,385	105	588.0	133	278.8
-34	227,800	-6	44,640	22	11,420	50	3,602	78	1,341	106	571.4	134	272.0
-33	213,800	-5	42,340	23	10,920	51	3,468	79	1,298	107	555.6	135	265.2
-32	200,600	-4	40,160	24	10,450	52	3,340	80	1,256	108	540.2	136	258.8
-31	188,400	-3	38,120	25	10,000	53	3,216	81	1,216	109	525.2	137	252.6
-30	177,000	-2	36,200	26	9,574	54	3,098	82	1,178	110	510.8	138	246.4
-29	166,400	-1	34,380	27	9,166	55	2,986	83	1,141	111	496.8	139	240.6
-28	156,500	0	32,660	28	8,778	56	2,878	84	1,105	112	483.2	140	234.8
-27	147,200	1	31,040	29	8,408	57	2,774	85	1,071	113	470.2	141	229.2
-26	138,500	2	29,500	30	8,058	58	2,674	86	1,038	114	457.4	142	223.8
-25	130,400	3	28,060	31	7,722	59	2,580	87	1,006	115	445.2	143	218.4
-24	122,900	4	26,680	32	7,404	60	2,488	88	975.0	116	433.4	144	213.4
-23	115,800	5	25,400	33	7,098	61	2,400	89	945.2	117	421.8	145	208.4
-22	109,100	6	24,180	34	6,808	62	2,316	90	916.4	118	410.6	146	203.6
-21	102,900	7	23,020	35	6,532	63	2,234	91	888.8	119	399.8	147	198.8
-20	97,120	8	21,920	36	6,268	64	2,158	92	862.0	120	389.4	148	194.2
-19	91,660	9	20,880	37	6016	65	2,082	93	836.4	121	379.2	149	189.7
-18	86,540	10	19,900	38	5776	66	2,012	94	811.4	122	369.4	150	185.4
-17	81,720	11	18,970	39	5546	67	1,942	95	787.4	123	359.8		
-16	77,220	12	18,090	40	5326	68	1,876	96	764.2	124	350.6		
-15	72,980	13	17,260	41	5118	69	1,813	97	741.8	125	341.6		
-14	69,000	14	16,460	42	4918	70	1,751	98	720.2	126	332.8		
-13	65,260	15	15,710	43	4726	71	1,693	99	699.4	127	324.4		

Sensor Mechanical Drawing

