

MODEL TS104 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 TS104 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.



TS104-170

TS104-32

TS104-76

TS104-138

(see reverse side for dimension)

Thermistor Specifications:

Base Resistance at 25°C: 50,000Ω

Interchangeable Tolerance: ±1.0°C over a 0°C to 100°C temperature range

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

0	163,300	25	50,000	50	18,010	75	7,400	100	3,396	125	1,708
1	155,200	26	47,870	51	17,340	76	7,160	101	3,298	126	1,664
2	147,500	27	45,830	52	16,700	77	6,925	102	3,204	127	1,622
3	140,300	28	43,890	53	16,080	78	6,705	103	3,113	128	1,581
4	133,400	29	42,040	54	15,490	79	6,490	104	3,025	129	1,541
5	127,000	30	40,290	55	14,930	80	6,280	105	2,940	130	1,503
6	120,900	31	38,610	56	14,390	81	6,080	106	2,857	131	1,465
7	115,100	32	37,020	57	13,870	82	5,890	107	2,778	132	1,429
8	109,600	33	35,490	58	13,370	83	5,705	108	2,701	133	1,394
9	104,400	34	34,040	59	12,900	84	5,525	109	2,626	134	1,360
10	99,500	35	32,660	60	12,400	85	5,355	110	2,554	135	1,326
11	94,850	36	31,340	61	12,000	86	5,190	111	2,484	136	1,294
12	90,450	37	30,080	62	11,580	87	5,030	112	2,416	137	1,263
13	86,300	38	28,880	63	11,170	88	4,875	113	2,351	138	1,232
14	82,300	39	27,730	64	10,790	89	4,726	114	2,287	139	1,203
15	78,550	40	26,630	65	10,410	90	4,582	115	2,226	140	1,174
16	75,000	41	25,590	66	10,060	91	4,444	116	2,167	141	1,146
17	71,600	42	24,590	67	9,710	92	4,310	117	2,109	142	1,119
18	68,400	43	23,630	68	9,380	93	4,182	118	2,053	143	1,092
19	65,350	44	22,720	69	9,065	94	4,057	119	1,999	144	1,067
20	62,450	45	21,840	70	8,755	95	3,937	120	1,947	145	1,042
21	59,700	46	21,010	71	8,465	96	3,821	121	1,896	146	1,018
22	57,100	47	20,210	72	8,185	97	3,709	122	1,847	147	994
23	54,600	48	19,440	73	7,910	98	3,601	123	1,799	148	971
24	52,250	49	18,710	74	7,650	99	3,497	124	1,753	149	949
										150	927



OVEN INDUSTRIES, INC.

PO BOX 290, MECHANICSBURG, PA 17055

TEL: 717-766-0721 FAX: 717-766-4786

e-mail: oven@ovenind.com web site: www.ovenind.com

BULLETIN NO. 2115

