

## MODEL TR136 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 TR136 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.

### Thermistor Specifications:

Base Resistance At 25°C: 15,000Ω  
 Interchangeable Tolerance: ±0.1°C over a 0°C to 70°C Temperature range

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

-20	146,735	2	44,397	24	15,676	46	6,289	68	2,806	90	1,369
-19	138,447	3	42,213	25	15,000	47	6,049	69	2,711	91	1,328
-18	130,677	4	40,150	26	14,356	48	5,820	70	2,620	92	1,288
-17	123,390	5	38,199	27	13,744	49	5,600	71	2,532	93	1,250
-16	116,554	6	36,354	28	13,161	50	5,391	72	2,448	94	1,212
-15	110,138	7	34,608	29	12,606	51	5,190	73	2,367	95	1,176
-14	104,113	8	32,957	30	12,078	52	4,997	74	2,288	96	1,142
-13	98,454	9	31,394	31	11,574	53	4,813	75	2,213	97	1,108
-12	93,137	10	29,914	32	11,095	54	4,637	76	2,141	98	1,076
-11	88,438	11	28,512	33	10,637	55	4,467	77	2,072	99	1,045
-10	83,438	12	27,183	34	10,202	56	4,305	78	2,005	100	1,014
-9	79,016	13	25,925	35	9,786	57	4,150	79	1,940	101	985
-8	74,855	14	24,731	36	9,389	58	4,001	80	1,878	102	957
-7	70,938	15	23,600	37	9,011	59	3,858	81	1,818	103	930
-6	67,249	16	22,526	38	8,650	60	3,721	82	1,761	104	903
-5	63,773	17	21,508	39	8,306	61	3,590	83	1,705	105	878
-4	60,498	18	20,541	40	7,976	62	3,464	84	1,652	106	853
-3	57,410	19	19,623	41	7,662	63	3,343	85	1,601	107	829
-2	54,498	20	18,751	42	7,362	64	3,227	86	1,551	108	806
-1	51,750	21	17,923	43	7,075	65	3,115	87	1,503	109	784
0	49,157	22	17,136	44	6,801	66	3,008	88	1,457	110	762
1	46,709	23	16,388	45	6,539	67	2,905	89	1,412		