NTC (%/°C) vs TEMPERATURE CURVES
NTC Thermistors

NTC (- %/°C) is negative temperature coefficient of resistance at temperature (T) expressed in % resistance change per °C. Since one NTC resistance change is approximately equivalent to + 1°C temperature change, NTC is useful in developing curve tracking thermistor specifications (e.g., Curve 1, 10,000 ohm ± 4.4% at + 25°C; 32,660 ohm ± 5.1% at 0°C 1753 ohm ± 3.4% at + 70°C results in a ± 1°C: curve tracking thermistor 0° to + 70°C, .5 NTC = ± .5°C, etc.).

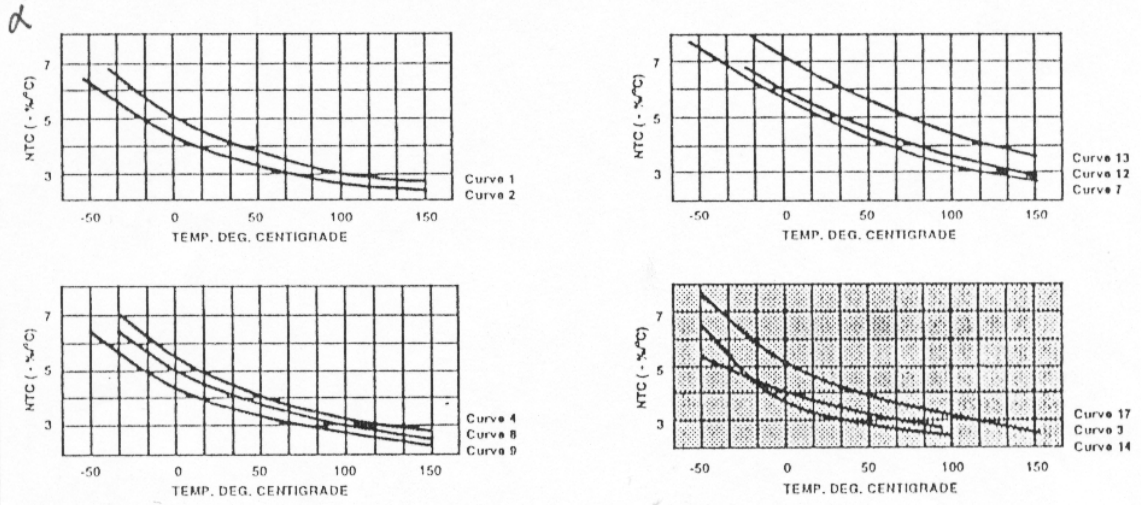
MT ± % is manufacturing tolerance at temperature. Add to resistance tolerance specified at + 25°C (e.g., Curve 1, 10 kilohm ± 10% at + 25°C, 1257 ohm ± 12.1% at + 80°C). Not applicable to curve tracking thermistors.

RT-R_{25} Ratio is resistance at temperature T divided by resistance at + 25°C. To determine the resistance of a NTC thermistor at temperatures other than + 25°C, multiply the ratio selected from the appropriate curve column above by resistance at + 25°C (e.g., Curve 1, 10 kilohm at + 25°C, 1257 ohm at + 80°C).

Note: For + 1°C Ratio Tables, see pages 18 to 23.

MAXIMUM TEMPERATURE for thermistors listed is + 150°C; however, continuous operation or cycling above + 125°C (curve tracking above the specified temperature range) may cause thermistors to exceed the originally specified tolerances.

CURVES



CURVE NUMBER	NTC @ + 25°C (%/°C)	BETA + 25°C/+ 75°C
1	- 4.40	3964
2	- 3.83	3477
3	- 3.70	3181
4	- 4.68	4247
7	- 4.83	4437
8	- 4.30	3925
9	- 4.03	3679
12	- 5.23	4842
13	- 6.22	5710
14	- 3.10	3022
17	- 4.54	4064