

The role of NTC thermistor in Baby Sleeping Monitors

With the development of science and technology, NTC thermistors are used in all aspects of people's lives.

For families with children, I believe everyone knows more or less about Baby Sleeping Monitors. The common Baby Sleeping Monitors on the market can send an alarm signal after the baby kicks off the quilt to remind parents to put the quilt on the baby in time. Prevent babies from catching cold and cause fever and colds.

Baby Sleeping Monitors are composed of structure: host (indicator, power switch, alarm film and somatosensory clothing socket inside), receiving clothing and somatosensory clothing (connected to the somatosensory clothing socket with a plug wire). Among them, NTC thermistor, which plays a key role, is connected in series on the underwear of the body-sensitive clothing, front, back, upper and lower parts.

Working principle of Baby Sleeping Monitors: Utilizing the characteristic that the resistance value of NTC thermistor decreases with increasing temperature, an alarm will be issued to remind parents in time when the baby kicks off the quilt and the body feels cold. On the contrary, if the infants and young children wear too much or the quilt is too thick, and the body temperature rises, an alarm will be issued to notify the parents to avoid overheating.

Our company specializes in the research, development and production of NTC thermistors and temperature sensors for nearly 12 years. The following small leather wire NTC thermistors can be used in Baby Sleeping Monitors.



Its main features:

1. High measurement accuracy
2. Strict tolerance of resistance and β value.

3. Fast response and small size.
4. It can run stably for a long time.
5. The rated resistance of 25C can be 1k Ω ~1000k Ω .
6. Common resistance values at 25 $^{\circ}$ C are: 1k Ω , 2k Ω , 2.252 Ω , 3k Ω , 4.7k Ω , 5k Ω , 6.8k Ω , 10k Ω , 15k Ω , 20k Ω , 30k Ω , 40k Ω , 47k Ω , 50k Ω , 100k Ω , 150k Ω , 1000k Ω , etc.
7. Dissipation factor: $\geq 3.0\text{mW/C}$ in still air.
8. Thermal time constant: ≤ 12 seconds in still air.
9. Operating temperature range: -45°C - 105°C .