

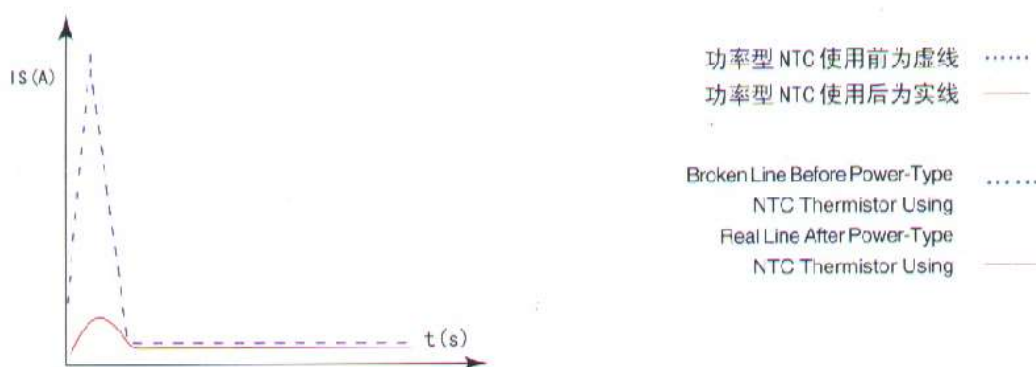


Basic Characteristic and Application Example of Power NTC Thermistor

1. Power Load-Temperature Characteristic Curve

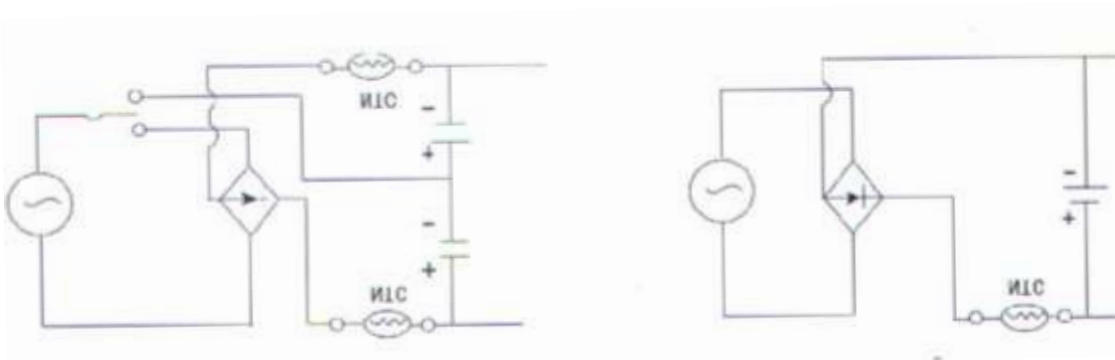


2. Sketch Map of Surge Current Protection In Circuit of Power NTC Thermistor





3. Typical Applied Circuit of Power NTC Thermistor



4. Selection Principle of Power NTC Thermistor

The max. operating current of resistance > the operating current in actual power loop
Rated resistance of power NTC Thermistor

$$R \geq \frac{\sqrt{2}E}{I_m}$$

In the equation

E is the loop voltage, I_m is the surge current

For conversion power, reversion power, switch power, UPS power $I_m=100$ times operating current.

For Filament, heater and so on add the loop $I_m=30$ times operating current

B value is larger, and the remnants resistance and the rise of temperature will be less.

Generally, the larger product of time constant and dissipation coefficient showed the larger thermal capacity of resistance and stronger capacity of surge current protection.