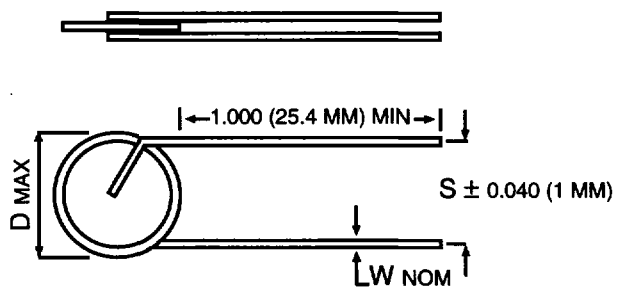
Standard PTC Thermistors for Overcurrent Protection

Maida Style #	V Maximum Voltage (volts)	R Ro @ 25° C (± 20%) (Ω)	I_{ns} Maximum No Switch Current (amps)	I_{ms} Minimum Must Switch Current (amps)	H Heat Capacity (W·s/°C)	∂ Dissipation Constant (mW/°C)	D Maximum Diameter (inches)	W Lead Diameter (inches)
6431PTC808M120150	15	0.8	0.89	1.58	0.57	15	0.650	0.032
6931PTC109M120150	15	1.0	0.77	1.37	0.48	14	0.600	0.032
6231PTC159M120150	15	1.5	0.56	0.99	0.32	11	0.500	0.025
7131PTC209M120150	15	2.0	0.46	0.82	0.25	10	0.450	0.025
6431PTC509M120500	50	5.0	0.36	0.63	0.85	15	0.650	0.032
7131PTC100M120500	50	10.0	0.21	0.37	0.38	10	0.450	0.025
6831PTC200M120500	50	20.0	0.13	0.23	0.21	8	0.350	0.025
6431PTC709M120131	132	7.0	0.31	0.55	1.41	16	0.650	0.032
6931PTC100M120131	132	10.0	0.25	0.45	1.19	15	0.600	0.032
6131PTC250M120131	132	25.0	0.13	0.23	0.48	10	0.400	0.025
6031PTC500M120131	132	50.0	0.08	0.15	0.25	8	0.300	0.025
5831PTC101M120131	132	100.0	0.05	0.10	0.16	7	0.250	0.025
7131PTC250M120261	265	25.0	0.14	0.25	0.94	12	0.450	0.025
6831PTC500M120261	265	50.0	0.09	0.16	0.53	9	0.350	0.025
5831PTC101M120261	265	100.0	0.06	0.10	0.24	8	0.250	0.025
6131PTC500M120401	400	50.0	0.10	0.18	0.96	12	0.400	0.025
6031PTC101M120401	400	100.0	0.06	0.11	0.49	9	0.300	0.025

All standard over-current protecting thermistors are uncoated, and have straight leads.

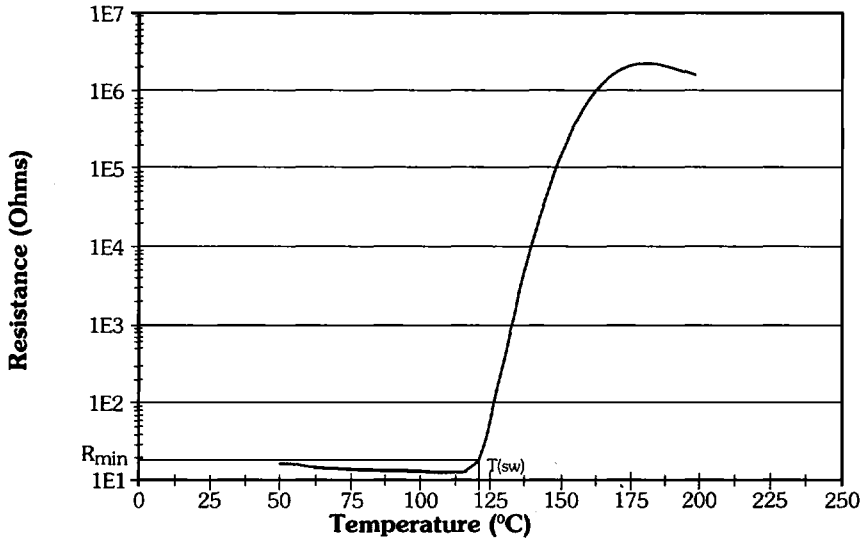
A variety of lead styles and a conformal coating are available upon request.

- Maximum voltage listed is either AC or DC.
- I_{ns} is the maximum amount of current that the device can carry without switching to its high resistance state. This parameter is determined at the maximum ambient temperature of 50°C.
- I_{ms} is the minimum amount of current required to switch the device into its high resistance state. This parameter is determined at the minimum ambient temperature of 0°C.



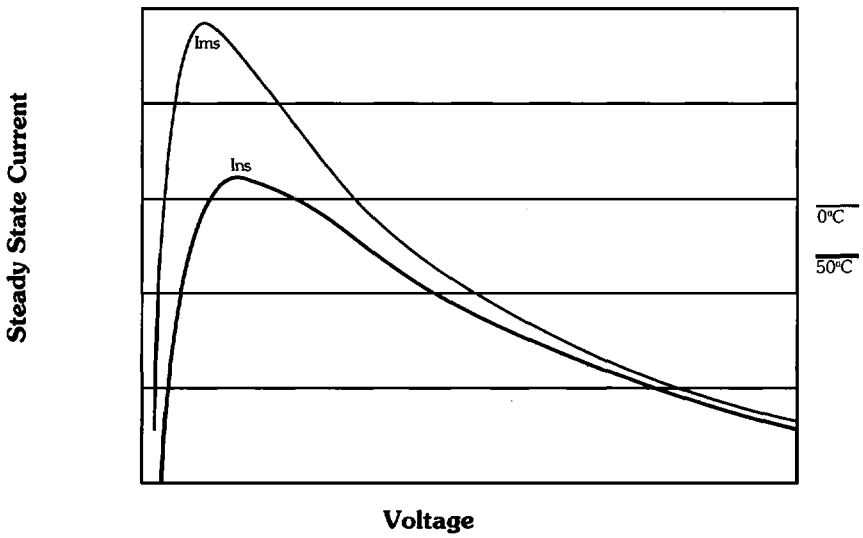
Lead Spacing (S) is 0.300" standard, 0.200" and 0.250" available upon request.

Curve for Switching PTC Thermistor



Power Curve for Typical PTC Thermistor

Steady State > 2



PTC Thermistor Part Numbering System

(A) XX (XX) PTC XXX A XXX XXX

❶ ❷ ❸ ❹ ❺ ❻ ❼

1. Coating Designation (optional)
D - Standard Epoxy Coating
H - High temperature silicone resin
No code with no lead code denotes Durez coating.
No code with 31 lead code denotes no coating

2. Bare Disk Diameter

59-0.188"	58-0.219"	60-0.250"	73-0.281"
68-0.313"	61-0.375"	71-0.438"	62-0.500"
69-0.563"	64-0.625"	63-0.688"	67-0.750"
65-0.813"	76-0.875"	66-1.000"	70-1.250"

3. Lead Configuration (optional)
10 - Inside kink, 20AWG
11 - Outside kink, 20AWG
31 - Straight leads, uncoated
96 - Inside kink, 18AWG
97 - Outside kink, 18AWG

4. Resistance Code
Two significant digits and a one digit multiplier as shown in Table #1.
This is the rating, in ohms (Ω), for zero power resistance at 25°C.

5. Resistance Tolerance
F - ±1% **G** - ±2% **H** - ±3% **J** - ±5% **K** - ±10%
L - ±15% **M** - ±20% **N** - ±25% **Q** - ±30%

6. Switch Temperature
Curie temperature in °C, ex. 080 = 80°C, 120 = 120°C.

7. Maximum Voltage
DC or RMS, two significant digits and one digit multiplier as shown below in Table #1

Table #1

0	1	2	3	4	5	6	7	8	9
10^0	10^1	10^2	10^3	10^4	10^5	10^6	10^7	10^{-2}	10^{-1}