

NTC Thermistors

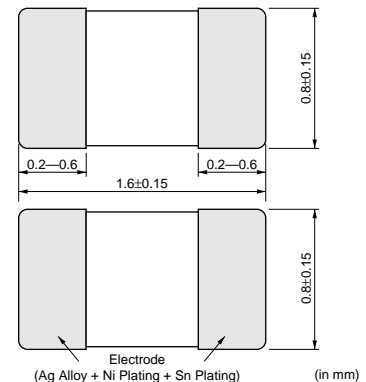


for Temperature Compensation 0603 (1608) Size

0201/0402/0603/0805 sized Chip NTC Thermistors have Ni barrier termination and provide excellent solderability and offer high stability in environment by unique inner construction.

■ Features

1. Excellent solderability and high stability in environment
2. Excellent long time aging stability
3. High accuracy in resistance and B-constant
4. Flow/Reflow soldering possible
5. Same B-constant in the same resistance in the three sizes (0805 size/0603 size/0402 size)
Easy to use smaller size in the circuits
6. Lead is not contained in the product.
7. NCP15, 18, 21 series are recognized by UL (UL1434, File No.E137188 Vol.2, Sec.2).



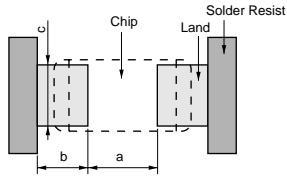
■ Applications

1. Temperature compensation of transistor, IC, crystal oscillator of mobile communications equipments
2. Temperature sensor for rechargeable batteries
3. Temperature compensation of LCD
4. Temperature compensation and sensing of car audio equipments (CD, MD, Tuner)
5. Temperature compensation of several kinds of circuits

Part Number	Resistance (25°C)	B-Constant (25-50°C) (K)	Permissible Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)	Operating Temperature Range (°C)
NCP18XF101□03RB	100ohm	3250 ±3%	3.10	100	1.0	-40 to 125
NCP18XF151□03RB	150ohm	3250 ±3%	2.50	100	1.0	-40 to 125
NCP18XM221□03RB	220ohm	3500 ±3%	2.10	100	1.0	-40 to 125
NCP18XM331□03RB	330ohm	3500 ±3%	1.70	100	1.0	-40 to 125
NCP18XQ471□03RB	470ohm	3650 ±3%	1.40	100	1.0	-40 to 125
NCP18XQ681□03RB	680ohm	3650 ±3%	1.20	100	1.0	-40 to 125
NCP18XQ102□03RB	1.0k ohm	3650 ±3%	1.00	100	1.0	-40 to 125
NCP18XW152□03RB	1.5k ohm	3950 ±3%	0.81	100	1.0	-40 to 125
NCP18XW222□03RB	2.2k ohm	3950 ±3%	0.67	100	1.0	-40 to 125
NCP18XW332□03RB	3.3k ohm	3950 ±3%	0.55	100	1.0	-40 to 125
NCP18XM472□03RB	4.7k ohm	3500 ±3%	0.46	100	1.0	-40 to 125
NCP18XW682□03RB	6.8k ohm	3950 ±3%	0.38	100	1.0	-40 to 125
NCP18XH103□03RB	10k ohm	3380 ±3%	0.31	100	1.0	-40 to 125
NCP18XW153□03RB	15k ohm	3950 ±3%	0.25	100	1.0	-40 to 125
NCP18XW223□03RB	22k ohm	3950 ±3%	0.21	100	1.0	-40 to 125
NCP18WB333□03RB	33k ohm	4050 ±3%	0.17	100	1.0	-40 to 125
NCP18WB473□03RB	47k ohm	4050 ±3%	0.14	100	1.0	-40 to 125
NCP18WD683□03RB	68k ohm	4150 ±3%	0.12	100	1.0	-40 to 125
NCP18WF104□03RB	100k ohm	4250 ±3%	0.10	100	1.0	-40 to 125
NCP18WM154□03RB	150k ohm	4500 ±3%	0.08	100	1.0	-40 to 125
NCP18WM224□03RB	220k ohm	4500 ±3%	0.06	100	1.0	-40 to 125
NCP18WM474□03RB	470k ohm	4500 ±3%	0.04	100	1.0	-40 to 125

Both flow and reflow soldering methods can be employed. A blank column is filled with resistance tolerance codes. (J: ±5%, K: ±10%)
Tolerance ±1% NCP18XH103F03RB is also available for 10k ohm type.

■ Standard Land Dimensions



Soldering Methods	a	b	c
Flow Soldering	0.6-1.0	0.8-0.9	0.6-0.8
Reflow Soldering	0.6-0.8	0.6-0.7	0.6-0.8

(in mm)