ANote • This PDF catalog is downloaded from the website of Murata Manufacturing co., Itd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. This PDF catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering. To a specification of the second state of the seco

NTC Thermistors



for Temperature Sensor and 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. NCP series are recognized by UL/cUL. (UL1434, File No.E137188)

Applications

- 1. Temperature compensation for transistor, IC and crystal oscillator in mobile communications
- 2. Temperature sensor for rechargeable batteries
- 3. Temperature compensation of LCD
- 4. Temperature compensation in general use of electric circuits

Part Number	Resistance (25°C) (ohm)	B-Constant (25-50°C) (K)	B-Constant (25-80°C) (Reference Value) (K)	B-Constant (25-85°C) (Reference Value) (K)	B-Constant (25-100°C) (Reference Value) (K)	Permissive Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)
NCP18XF101D03RB	100	3250 ±3%	3282	3284	3296	3.10	100	1
NCP18XF151D03RB	150	3250 ±3%	3282	3284	3296	2.50	100	1
NCP18XM221 03RB	220	3500 ±3%	3539	3545	3560	2.10	100	1
NCP18XM331D03RB	330	3500 ±3%	3539	3545	3560	1.70	100	1
NCP18XQ471 03RB	470	3650 ±2%	3688	3693	3706	1.40	100	1
NCP18XQ681D03RB	680	3650 ±3%	3688	3693	3706	1.20	100	1
NCP18XQ102D03RB	1.0k	3650 ±2%	3688	3693	3706	1.00	100	1
NCP18XW152D03RB	1.5k	3950 ±3%	3982	3987	3998	0.81	100	1
NCP18XW222D03RB	2.2k	3950 ±3%	3982	3987	3998	0.67	100	1
NCP18XW332D03RB	3.3k	3950 ±3%	3982	3987	3998	0.55	100	1
NCP18XM472D03RB	4.7k	3500 ±2%	3539	3545	3560	0.46	100	1
NCP18XW682D03RB	6.8k	3950 ±3%	3982	3987	3998	0.38	100	1
NCP18XH103D03RB	10k ±0.5%	3380 ±0.7%	3428	3434	3455	0.31	100	1
NCP18XH103F03RB	10k ±1%	3380 ±1%	3428	3434	3455	0.31	100	1
NCP18XH103D03RB	10k	3380 ±1%	3428	3434	3455	0.31	100	1
NCP18XV103D03RB	10k	3900 ±3%	3930	3934	3944	0.31	100	1
NCP18XW153D03RB	15k	3950 ±3%	3982	3987	3998	0.25	100	1
NCP18XW223D03RB	22k	3950 ±3%	3982	3987	3998	0.21	100	1
NCP18WB333D03RB	33k	4050 ±3%	4101	4108	4131	0.17	100	1
NCP18WB473D03RB	47k ±0.5%	4030 ±0.5%	4101	4108	4131	0.14	100	1
NCP18WB473F10RB	47k ±1%	4050 ±1.5%	4101	4108	4131	0.14	100	1
NCP18WB473D03RB	47k	4050 ±2%	4101	4108	4131	0.14	100	1
NCP18WD683D03RB	68k	4150 ±3%	4201	4209	4232	0.12	100	1
NCP18WF104D03RB	100k ±0.5%	4200 ±0.5%	4255	4260	4282	0.10	100	1
NCP18WF104F12RB	100k ±1%	4200 ±1%	4255	4260	4282	0.10	100	1







ANote • This PDF catalog is downloaded from the website of Murata Manufacturing co., ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
 • This PDF catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

Continued from the preceding page.

Part Number	Resistance (25°C) (ohm)	B-Constant (25-50°C) (K)	B-Constant (25-80°C) (Reference Value) (K)	B-Constant (25-85°C) (Reference Value) (K)	B-Constant (25-100°C) (Reference Value) (K)	Permissive Operating Current (25°C) (mA)	Rated Electric Power (25°C) (mW)	Typical Dissipation Constant (25°C) (mW/°C)
NCP18WF104D03RB	100k	4250 ±2%	4255	4260	4282	0.10	100	1
NCP18WM154D03RB	150k	4500 ±3%	4571	4582	4614	0.08	100	1
NCP18WM224D03RB	220k	4500 ±3%	4571	4582	4614	0.06	100	1
NCP18WM474D03RB	470k	4500 ±3%	4571	4582	4614	0.04	100	1

A blank column is filled with resistance tolerance codes (E: $\pm 3\%$, J: $\pm 5\%$).

Rated Electric Power is necessary electric power that Thermistor's temperature rises 100°C by self heating at 25°C in still air.

Operating Temperature Range: -40°C to +125°C