

SMD NTC Chip Thermistor

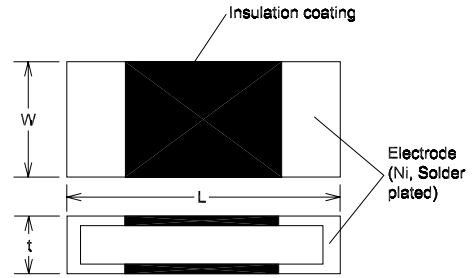
N7 Series



Applications:

Temperature Compensation
 Temperature Measurement
 Telecommunications
 Battery Pack

Consumer Appliances
 Industrial Equipment
 Measuring Equipment



Specifications

| Part # | Resistance @ 25°C (Ω) | $\beta_{25/85}$ (K) | Dissipation Constant (mW/°C) | Rated Power (mW) | Dimensions (mm) | | | Size Code | Operating Temperature Range | |
|---------------|-----------------------|---------------------|------------------------------|------------------|-----------------|------------|------------------|-------------|-----------------------------|--------------|
| | | | | | L | W | t _{max} | | | |
| N71-101J-280J | 100 | 2800 | 3.0 | 400 | 3.2 ± 0.2 | 1.6 ± 0.2 | 1 | (1206 size) | -40 ~ +125°C | |
| N71-351J-325J | 350 | 3250 | | | | | | | -40 ~ +150°C | |
| N71-471J-325J | 470 | 3250 | | | | | | | -40 ~ +125°C | |
| N71-501J-325J | 500 | 3250 | | | | | | | -40 ~ +150°C | |
| N71-801J-325J | 800 | 3250 | | | | | | | -40 ~ +125°C | |
| N71-102J-325J | 1k | 3250 | | | | | | | -40 ~ +150°C | |
| N71-152J-345J | 1.5k | 3450 | | | | | | | -40 ~ +125°C | |
| N71-172J-410J | 1.7k | 4100 | | | | | | | -40 ~ +150°C | |
| N71-202J-410J | 2k | 4100 | | | | | | | -40 ~ +125°C | |
| N71-222J-410J | 2.2k | 4100 | | | | | | | -40 ~ +150°C | |
| N71-252J-410J | 2.5k | 4100 | | | | | | | -40 ~ +125°C | |
| N71-272J-410J | 2.7k | 4100 | | | | | | | -40 ~ +150°C | |
| N71-302J-410J | 3k | 4100 | | | | | | | -40 ~ +125°C | |
| N71-472J-355J | 4.7k | 3550 | | | | | | | -40 ~ +150°C | |
| N71-502J-355J | 5k | 3550 | | | | | | | -40 ~ +125°C | |
| N71-103J-375J | 10k | 3750 | | | | | | | -40 ~ +150°C | |
| N71-153J-375J | 15k | 3750 | | | | | | | -40 ~ +125°C | |
| N71-153J-400J | 15k | 4000 | | | | | | | -40 ~ +150°C | |
| N71-203J-400J | 20k | 4000 | | | | | | | -40 ~ +125°C | |
| N71-223J-400J | 22k | 4000 | | | | | | | -40 ~ +150°C | |
| N71-303J-400J | 30k | 4000 | | | | | | | -40 ~ +125°C | |
| N71-333J-400J | 33k | 4000 | | | | | | | -40 ~ +150°C | |
| N71-473J-400J | 47k | 4000 | | | | | | | -40 ~ +125°C | |
| N71-503J-400J | 50k | 4000 | | | | | | | -40 ~ +150°C | |
| N71-104J-425J | 100k | 4250 | | | | | | | -40 ~ +125°C | |
| N71-154J-425J | 150k | 4250 | | | | | | | -40 ~ +150°C | |
| N71-204J-425J | 200k | 4250 | | | | | | | -40 ~ +125°C | |
| N71-304J-435J | 300k | 4350 | | | | | | | -40 ~ +150°C | |
| N71-474J-435J | 470k | 4350 | | | | | | | -40 ~ +125°C | |
| N71-504J-435J | 500k | 4350 | | | | | | | -40 ~ +150°C | |
| N72-400J-280J | 40 | 2800 | 2.0 | 300 | 2.0 ± 0.2 | 1.25 ± 0.2 | 1.2 | 2 | (0805 size) | -40 ~ +125°C |
| N72-680J-280J | 68 | 2800 | | | | | | | | -40 ~ +150°C |
| N72-800J-280J | 80 | 2800 | | | | | | | | -40 ~ +125°C |
| N72-101J-280J | 100 | 2800 | | | | | | | | -40 ~ +150°C |
| N72-201J-310J | 200 | 3100 | | | | | | | | -40 ~ +125°C |
| N72-221J-310J | 220 | 3100 | | | | | | | | -40 ~ +150°C |
| N72-471J-325J | 470 | 3250 | | | | | | | | -40 ~ +125°C |
| N72-501J-325J | 500 | 3250 | | | | | | | | -40 ~ +150°C |
| N72-681J-325J | 680 | 3250 | | | | | | | | -40 ~ +125°C |
| N72-102J-325J | 1k | 3250 | | | | | | | | -40 ~ +150°C |
| N72-152J-345J | 1.5k | 3450 | | | | | | | | -40 ~ +125°C |
| N72-202J-410J | 2k | 4100 | | | | | | | | -40 ~ +150°C |
| N72-222J-410J | 2.2k | 4100 | | | | | | | | -40 ~ +125°C |
| N72-252J-410J | 2.5k | 4100 | | | | | | | | -40 ~ +150°C |
| N72-302J-410J | 3k | 4100 | | | | | | | | -40 ~ +125°C |
| N72-332J-410J | 3.3k | 4100 | | | | | | | | -40 ~ +150°C |
| N72-472J-355J | 4.7k | 3550 | | | | | | | | -40 ~ +125°C |
| N72-502J-355J | 5k | 3550 | | | | | | | | -40 ~ +150°C |
| N72-682J-375J | 6.8k | 3750 | | | | | | | | -40 ~ +125°C |
| N72-103J-344J | 10k | 3435 | | | | | | | | -40 ~ +150°C |
| N72-103J-375J | 10k | 3750 | -40 ~ +125°C | | | | | | | |
| N72-103J-380J | 10k | 3800 | -40 ~ +150°C | | | | | | | |
| N72-153J-400J | 15k | 4000 | -40 ~ +125°C | | | | | | | |
| N72-203J-400J | 20k | 4000 | -40 ~ +150°C | | | | | | | |
| N72-223J-400J | 22k | 4000 | -40 ~ +125°C | | | | | | | |
| N72-303J-400J | 30k | 4000 | -40 ~ +150°C | | | | | | | |

N7 Series SMD NTC Chip Thermistor

Specifications (continued)

| Part # | Resistance @ 25°C (Ω) | $\beta_{25/85}$ (K) | Dissipation Constant (mW/°C) | Rated Power (mW) | Dimensions (mm) | | | Size Code | Operating Temperature Range |
|---------------|-----------------------------|------------------------|------------------------------------|------------------------|-----------------|------------|----------|------------------|-----------------------------------|
| | | | | | L | W | t max | | |
| N72-333J-400J | 33k | 4000 | 2.0 | 300 | 2.0 ± 0.2 | 1.25 ± 0.2 | 1.2 | 2 (0805 size) | -40 ~ +150°C |
| N72-473J-415J | 47k | 4150 | | | | | | | -40 ~ +125°C |
| N72-503J-400J | 50k | 4000 | | | | | | | -40 ~ +150°C |
| N72-503J-415J | 50k | 4150 | | | | | | | -40 ~ +150°C |
| N72-683J-415J | 68k | 4150 | | | | | | | -40 ~ +150°C |
| N72-104J-425J | 100k | 4250 | | | | | | | -40 ~ +150°C |
| N72-154J-425J | 150k | 4250 | | | | | | | -40 ~ +150°C |
| N72-204J-425J | 200k | 4250 | | | | | | | -40 ~ +150°C |
| N72-304J-425J | 300k | 4250 | | | | | | | -40 ~ +150°C |
| N72-474J-435J | 470k | 4350 | | | | | | | -40 ~ +125°C |
| N72-504J-435J | 500k | 4350 | -40 ~ +125°C | | | | | | |
| N73-300J-275J | 30 | 2750 | 1.7 | 150 | 1.6 ± 0.2 | 0.8 ± 0.2 | 1.0 | 3 (0603 size) | -40 ~ +125°C |
| N73-400J-280J | 40 | 2800 | | | | | | | -40 ~ +125°C |
| N73-500J-280J | 50 | 2800 | | | | | | | -40 ~ +125°C |
| N73-680J-280J | 68 | 2800 | | | | | | | -40 ~ +125°C |
| N73-800J-280J | 80 | 2800 | | | | | | | -40 ~ +125°C |
| N73-101J-280J | 100 | 2800 | | | | | | | -40 ~ +125°C |
| N73-221J-305J | 220 | 3050 | | | | | | | -40 ~ +125°C |
| N73-331J-320J | 330 | 3200 | | | | | | | -40 ~ +125°C |
| N73-471J-320J | 470 | 3200 | | | | | | | -40 ~ +125°C |
| N73-501J-320J | 500 | 3200 | | | | | | | -40 ~ +125°C |
| N73-501J-325J | 500 | 3250 | | | | | | | -40 ~ +125°C |
| N73-681J-325J | 680 | 3250 | | | | | | | -40 ~ +125°C |
| N73-102J-325J | 1k | 3250 | | | | | | | -40 ~ +125°C |
| N73-152J-345J | 1.5k | 3450 | | | | | | | -40 ~ +125°C |
| N73-202J-410J | 2k | 4100 | | | | | | | -40 ~ +125°C |
| N73-222J-410J | 2.2k | 4100 | | | | | | | -40 ~ +125°C |
| N73-252J-410J | 2.5k | 4100 | | | | | | | -40 ~ +125°C |
| N73-272J-410J | 2.7k | 4100 | | | | | | | -40 ~ +125°C |
| N73-302J-410J | 3k | 4100 | | | | | | | -40 ~ +125°C |
| N73-332J-410J | 3.3k | 4100 | | | | | | | -40 ~ +125°C |
| N73-472J-355J | 4.7k | 3550 | | | | | | | -40 ~ +125°C |
| N73-502J-355J | 5k | 3550 | | | | | | | -40 ~ +125°C |
| N73-682J-355J | 6.8k | 3550 | | | | | | | -40 ~ +125°C |
| N73-103J-344J | 10k | 3435 | | | | | | | -40 ~ +125°C |
| N73-103J-375J | 10k | 3750 | | | | | | | -40 ~ +125°C |
| N73-103J-400J | 10k | 4000 | | | | | | | -40 ~ +125°C |
| N73-153J-380J | 15k | 3800 | | | | | | | -40 ~ +125°C |
| N73-203J-380J | 20k | 3800 | | | | | | | -40 ~ +125°C |
| N73-223J-380J | 22k | 3800 | | | | | | | -40 ~ +125°C |
| N73-303J-400J | 30k | 4000 | | | | | | | -40 ~ +125°C |
| N73-333J-400J | 33k | 4000 | -40 ~ +125°C | | | | | | |
| N73-473J-400J | 47k | 4000 | -40 ~ +125°C | | | | | | |
| N73-503J-400J | 50k | 4000 | -40 ~ +125°C | | | | | | |
| N73-683J-400J | 68k | 4000 | -40 ~ +125°C | | | | | | |
| N73-104J-415J | 100k | 4150 | -40 ~ +125°C | | | | | | |
| N73-154J-425J | 150k | 4250 | -40 ~ +125°C | | | | | | |
| N73-204J-425J | 200k | 4250 | -40 ~ +125°C | | | | | | |
| N74-400J-280J | 40 | 2800 | 1.5 | 40 | 1.0 ± 0.2 | 0.5 ± 0.2 | 0.7 | 4 (0402 size) | -40 ~ +125°C |
| N74-102J-330J | 1k | 3300 | | | | | | | -40 ~ +125°C |
| N74-122J-330J | 1.2k | 3300 | | | | | | | -40 ~ +125°C |
| N74-142J-330J | 1.4k | 3300 | | | | | | | -40 ~ +125°C |
| N74-152J-330J | 1.5k | 3300 | | | | | | | -40 ~ +125°C |
| N74-202J-410J | 2k | 4100 | | | | | | | -40 ~ +125°C |
| N74-222J-410J | 2.2k | 4100 | | | | | | | -40 ~ +125°C |
| N74-252J-410J | 2.5k | 4100 | | | | | | | -40 ~ +125°C |
| N74-302J-410J | 3k | 4100 | | | | | | | -40 ~ +125°C |
| N74-332J-410J | 3.3k | 4100 | | | | | | | -40 ~ +125°C |
| N74-352J-410J | 3.5k | 4100 | | | | | | | -40 ~ +125°C |
| N74-402J-410J | 4k | 4100 | | | | | | | -40 ~ +125°C |
| N74-652J-410J | 6.5k | 4100 | | | | | | | -40 ~ +125°C |
| N74-103J-344J | 10k | 3435 | | | | | | | -40 ~ +125°C |
| N74-303J-400J | 30k | 4000 | | | | | | | -40 ~ +125°C |
| N74-333J-400J | 33k | 4000 | | | | | | | -40 ~ +125°C |
| N74-473J-400J | 47k | 4000 | | | | | | | -40 ~ +125°C |
| N74-683J-400J | 68k | 4000 | | | | | | | -40 ~ +125°C |
| N74-104J-425J | 100k | 4250 | | | | | | | -40 ~ +125°C |
| N74-154J-425J | 150k | 4250 | | | | | | | -40 ~ +125°C |
| N74-204J-425J | 200k | 4250 | -40 ~ +125°C | | | | | | |

N7 Series SMD NTC Chip Thermistor

R vs T Table

| T(°C) | Part # | | | | | | |
|-------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | N72-400J-280J | N71-501J-325J | N71-102J-325J | N71-202J-410J | N71-302J-410J | N71-502J-355J | N71-103J-375J |
| | N73-400J-280J | N72-501J-325J | N72-102J-325J | N72-202J-410J | N72-302J-410J | N72-502J-355J | N72-103J-375J |
| | N74-400J-280J | | N73-102J-325J | N73-202J-410J | N73-302J-410J | N73-502J-355J | N73-103J-375J |
| | R _T (Ω) | R _T (Ω) | R _T (kΩ) | R _T (kΩ) | R _T (kΩ) | R _T (kΩ) | R _T (kΩ) |
| -40 | 527.2 | 9,437 | 17.84 | 95.11 | 142.7 | 112.9 | 249.2 |
| -35 | 413.1 | 7,157 | 13.64 | 65.82 | 98.74 | 84.44 | 184.4 |
| -30 | 326.7 | 5,484 | 10.52 | 46.22 | 69.33 | 63.82 | 138.0 |
| -25 | 260.7 | 4,243 | 8.195 | 32.89 | 49.34 | 48.70 | 104.3 |
| -20 | 209.7 | 3,313 | 6.435 | 23.71 | 35.56 | 37.50 | 79.57 |
| -15 | 169.9 | 2,609 | 5.094 | 17.30 | 25.96 | 29.13 | 61.28 |
| -10 | 138.8 | 2,071 | 4.063 | 12.77 | 19.16 | 22.81 | 47.60 |
| -5 | 114.1 | 1,657 | 3.264 | 9.529 | 14.29 | 17.99 | 37.28 |
| 0 | 94.45 | 1,335 | 2.639 | 7.182 | 10.77 | 14.30 | 29.43 |
| 5 | 78.65 | 1,084 | 2.149 | 5.466 | 8.198 | 11.45 | 23.40 |
| 10 | 65.88 | 885.0 | 1.760 | 4.198 | 6.297 | 9.221 | 18.74 |
| 15 | 55.49 | 727.4 | 1.450 | 3.252 | 4.878 | 7.476 | 15.10 |
| 20 | 46.99 | 601.4 | 1.201 | 2.540 | 3.811 | 6.096 | 12.25 |
| 25 | 40.00 | 500.0 | 1.000 | 2.000 | 3.000 | 5.000 | 10.00 |
| 30 | 34.18 | 418.3 | 0.8375 | 1.587 | 2.380 | 4.124 | 8.212 |
| 35 | 29.36 | 351.9 | 0.7052 | 1.269 | 1.904 | 3.420 | 6.774 |
| 40 | 25.34 | 297.6 | 0.5967 | 1.024 | 1.535 | 2.852 | 5.611 |
| 45 | 21.96 | 252.9 | 0.5074 | 0.8317 | 1.247 | 2.390 | 4.667 |
| 50 | 19.12 | 216.0 | 0.4334 | 0.6807 | 1.021 | 2.012 | 3.897 |
| 55 | 16.71 | 185.3 | 0.3719 | 0.5610 | 0.8415 | 1.702 | 3.266 |
| 60 | 14.66 | 159.7 | 0.3204 | 0.4654 | 0.6980 | 1.446 | 2.747 |
| 65 | 12.91 | 138.2 | 0.2772 | 0.3885 | 0.5827 | 1.234 | 2.319 |
| 70 | 11.41 | 120.1 | 0.2407 | 0.3262 | 0.4894 | 1.057 | 1.964 |
| 75 | 10.12 | 104.7 | 0.2098 | 0.2755 | 0.4133 | 0.9095 | 1.669 |
| 80 | 9.012 | 91.67 | 0.1835 | 0.2340 | 0.3510 | 0.7851 | 1.422 |
| 85 | 8.025 | 80.52 | 0.1610 | 0.1998 | 0.2997 | 0.6803 | 1.216 |
| 90 | 7.163 | 70.98 | 0.1418 | 0.1718 | 0.2558 | 0.5917 | 1.046 |
| 95 | 6.409 | 62.78 | 0.1253 | 0.1486 | 0.2228 | 0.5164 | 0.9026 |
| 100 | 5.747 | 55.70 | 0.1111 | 0.1291 | 0.1937 | 0.4521 | 0.7816 |
| 105 | 5.164 | 49.56 | 0.0972 | 0.1128 | 0.1691 | 0.3971 | 0.6790 |
| 110 | 4.651 | 44.24 | 0.0880 | 0.0989 | 0.1484 | 0.3498 | 0.5917 |
| 115 | 4.197 | 39.59 | 0.0787 | 0.0872 | 0.1308 | 0.3091 | 0.5172 |
| 120 | 3.794 | 35.53 | 0.0705 | 0.0772 | 0.1157 | 0.2739 | 0.4533 |
| 125 | 3.437 | 31.97 | 0.0633 | 0.0686 | 0.1029 | 0.2433 | 0.3985 |
| 130 | | 28.83 | 0.0570 | 0.0619 | 0.0917 | 0.2167 | 0.3512 |
| 135 | | 26.07 | 0.0515 | 0.0548 | 0.0822 | 0.1935 | 0.3103 |
| 140 | | 23.63 | 0.0466 | 0.0493 | 0.0739 | 0.1732 | 0.2749 |
| 145 | | 21.46 | 0.0422 | 0.0444 | 0.0666 | 0.1554 | 0.2441 |
| 150 | | 19.54 | 0.0384 | 0.0402 | 0.0603 | 0.1398 | 0.2173 |

Part Numbering System:

N7 **1** **101** **J** **280** **J** **T**
 1 2 3 4 5 6 7

- 1 = Stetron Series: N7 Series
- 2 = Size Code: (1, 2, 3, 4)
- 3 = Resistance @ R25:* 101 = 100Ω
 (2 most significant figures followed by number of zeros)
- 4 = Resistance Tolerance:** J = ±5%
- 5 = B-Value: 280 = 2800K
- 6 = B-Value Tolerance:** J = ±5%
- 7 = Packaging:
 Blank = Bulk
 T = Tape/Reel***

* Other resistance values are available.

** Other tolerances available. Contact Stetron sales office for details.

***Reference taping specs on the next page



90 Broadway, Buffalo, NY 14203-1687

2651 John Street, Unit #4 & 5, Markham, Ontario L3R 2W5

☎: 716-854-3443

☎: 905-475-6202

Fax: 716-854-3448

Fax: 905-475-1926

✉: thermistors@stetron.com
 Website: www.stetron.com