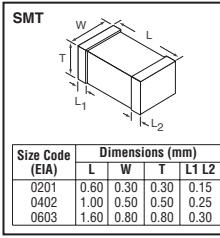


Panasonic®

Multilayer Chip NTC Thermistors (ERTJ)



The Multilayer Chip NTC Thermistors are especially designed for surface mountings featuring the miniature sizes of "0201", "0402" and "0603" type (EIA) with highly reliable multilayer and monolithic structure. **FEATURES:** • Highly reliable multilayer/monolithic structure • Superior heat resistance to reflow soldering and excellent solderability thanks to the unique external electrodes of three metallic layers • Operating Temperature Range: -40°C - 125°C • Resistance to Soldering Heat: 270°C-3s, 260°C-10s • Heat Dissipation Constant (mounted on a glass epoxy, 1.6t): **0201 Series:** approximately 1mw/°C • **0402 Series:** approximately 2mw/°C and **0603 Series:** approximately 3mw/°C • Rated Maximum Power Dissipation: **0201 Series:** 33 mW, **0402 Series:** 66 mW and **0603 Series:** 100 mW

| Zero-Power Resist. (at 25°C) | Resistance Tol. | B Value | | Digi-Key Part No. | Cut Tape Pricing | | | Tape and Reel† | | Panasonic Part No. |
|------------------------------|-----------------|-----------|-----------|-------------------|------------------|------|-------|----------------|----------|--------------------|
| | | B25/50 | B25/85 | | 1 | 10 | 100 | Qty. | Pricing | |
| 0201 | | | | | | | | | | |
| 2KΩ | ±5% | 4500K ±2% | (4450K) | P12020CT-ND | .59 | 3.37 | 21.84 | 15,000 | 129.05/M | ERT-JZET202J |
| 3KΩ | ±5% | 4500K ±2% | (4450K) | P12021CT-ND | .59 | 3.37 | 21.84 | 15,000 | 129.05/M | ERT-JZET302J |
| 4.7KΩ | ±5% | 4500K ±2% | — | P12805CT-ND | .30 | 1.65 | 10.19 | 15,000 | 56.11/M | ERT-JZET472J |
| 10KΩ | ±5% | — | 3435K ±2% | P12358CT-ND | .28 | 1.54 | 9.50 | 15,000 | 52.75/M | ERT-JZEG103JA |
| 47KΩ | ±5% | 4050K ±3% | — | P12359CT-ND | .28 | 1.54 | 9.50 | 15,000 | 52.75/M | ERT-JZEP473J |
| 100KΩ | ±3% | 4500K ±3% | (4750K) | P13700CT-ND | .38 | 2.17 | 14.05 | 15,000 | 83.04/M | ERT-JZEV104H |
| 100KΩ | ±5% | 4700K ±2% | — | P12360CT-ND | .28 | 1.54 | 9.50 | 15,000 | 52.75/M | ERT-JZEV104J |
| 0402 | | | | | | | | | | |
| 22Ω | ±5% | 2750K ±3% | (2700K) | P10557CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA220J |
| 33Ω | ±5% | 2750K ±3% | (2700K) | P10558CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA330J |
| 40Ω | ±5% | 2750K ±3% | (2700K) | P10559CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA400J |
| 47Ω | ±5% | 2750K ±3% | (2700K) | P10560CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA470J |
| 68Ω | ±5% | 2800K ±3% | (2700K) | P10561CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA680J |
| 100Ω | ±5% | 2800K ±3% | (2750K) | P10562CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA101J |
| 150Ω | ±5% | 2800K ±3% | (2750K) | P10563CT-ND | .43 | 2.32 | 14.36 | 10,000 | 79.68/M | ERT-J0EA151J |
| 1.0KΩ | ±5% | 4500K ±3% | (4450K) | P10564CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET102J |
| 1.5KΩ | ±5% | 4500K ±3% | (4450K) | P10565CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET152J |
| 2.0KΩ | ±5% | 4500K ±3% | (4450K) | P10566CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET202J |
| 2.2KΩ | ±5% | 4500K ±3% | (4450K) | P10567CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET222J |
| 3.0KΩ | ±5% | 4500K ±3% | (4450K) | P10568CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET302J |
| 3.3KΩ | ±5% | 4500K ±3% | (4450K) | P10569CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET332J |
| 4.7KΩ | ±5% | 4500K ±3% | (4450K) | P10570CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ET472J |
| 3.3KΩ | ±5% | 4250K ±3% | (4300K) | P10571CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ER332J |
| 4.7KΩ | ±5% | 4250K ±3% | (4300K) | P10572CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ER472J |
| 6.8KΩ | ±5% | 4250K ±3% | (4300K) | P10573CT-ND | .37 | 2.03 | 12.56 | 10,000 | 69.58/M | ERT-J0ER682J |
| 10KΩ | ±5% | 4250K ±3% | (4300K) | P10574CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0ER103J |
| 10KΩ | ±1% | (3375K) | 3435K ±1% | P12007CT-ND | .66 | 3.84 | 26.28 | 10,000 | 163.84/M | ERT-J0EG103FA |
| 10KΩ | ±2% | (3375K) | 3435K ±1% | P12008CT-ND | .65 | 3.71 | 24.09 | 10,000 | 141.40/M | ERT-J0EG103GA |
| 10KΩ | ±3% | 3900K ±2% | (3970K) | P13701CT-ND | .44 | 2.47 | 16.06 | 10,000 | 94.27/M | ERT-J0EM103H |
| 10KΩ | ±3% | 4250K ±2% | (4300K) | P13702CT-ND | .44 | 2.47 | 16.06 | 10,000 | 94.27/M | ERT-J0EM103H |
| 10KΩ | ±3% | (3375K) | 3435K ±1% | P12009CT-ND | .55 | 3.10 | 20.08 | 10,000 | 117.83/M | ERT-J0EG103HA |
| 10KΩ | ±5% | (3375K) | 3435K ±1% | P12010CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EG103JA |
| 10KΩ | ±5% | 3900K ±2% | (4300K) | P12985CT-ND | .29 | 1.60 | 9.88 | 10,000 | 54.99/M | ERT-J0EM103J |
| 15KΩ | ±5% | 4250K ±3% | (4300K) | P10575CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0ER153J |
| 22KΩ | ±5% | 4250K ±3% | (4300K) | P10576CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0ER223J |
| 33KΩ | ±5% | 4050K ±2% | — | P13579CT-ND | .66 | 3.87 | 26.51 | 10,000 | 164.96/M | ERT-J0EP333J |
| 33KΩ | ±5% | 4250K ±3% | (4300K) | P10577CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0ER333J |
| 47KΩ | ±5% | 4700K ±3% | (4750K) | P10578CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV473J |
| 68KΩ | ±5% | 4700K ±3% | (4750K) | P10579CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV683J |
| 47KΩ | ±5% | 4050K ±2% | (4100K) | P11441CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EA473J |
| 100KΩ | ±2% | 4700K ±2% | (4750K) | P13705CT-ND | .61 | 3.40 | 22.08 | 10,000 | 130.18/M | ERT-J0EV104G |
| 100KΩ | ±3% | 4500K ±2% | (4580K) | P13704CT-ND | .44 | 2.47 | 16.06 | 10,000 | 94.27/M | ERT-J0ET104H |
| 100KΩ | ±3% | 4700K ±2% | (4750K) | P13706CT-ND | .44 | 2.47 | 16.06 | 10,000 | 94.27/M | ERT-J0EV104H |
| 100KΩ | ±5% | 4250K ±2% | (4300K) | P13703CT-ND | .55 | 3.07 | 20.00 | 10,000 | 117.83/M | ERT-J0ER154J |
| 100KΩ | ±5% | 4300K ±2% | — | P12986CT-ND | .66 | 3.87 | 26.51 | 10,000 | 164.96/M | ERT-J0ES104J |
| 100KΩ | ±5% | 4500K ±2% | — | P12988CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0ET104J |
| 100KΩ | ±5% | 4700K ±2% | (4750K) | P11442CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV104J |
| 150KΩ | ±5% | 4500K ±2% | — | P13581CT-ND | .66 | 3.87 | 26.51 | 10,000 | 164.96/M | ERT-J0ET154J |
| 150KΩ | ±5% | 4700K ±2% | (4750K) | P11443CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV154J |
| 220KΩ | ±5% | 4700K ±2% | (4750K) | P11444CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV224J |
| 330KΩ | ±5% | 4700K ±2% | (4750K) | P11445CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV334J |
| 470KΩ | ±5% | 4700K ±2% | (4750K) | P11446CT-ND | .39 | 2.18 | 13.47 | 10,000 | 74.07/M | ERT-J0EV474J |
| 0603 | | | | | | | | | | |
| 22Ω | ±5% | 2750K ±3% | (2700K) | P10531CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA220J |
| 33Ω | ±5% | 2750K ±3% | (2700K) | P10532CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA330J |
| 40Ω | ±5% | 2800K ±3% | (2750K) | P10533CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA400J |
| 47Ω | ±5% | 2800K ±3% | (2750K) | P10534CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA470J |
| 68Ω | ±5% | 2800K ±3% | (2750K) | P10535CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA680J |
| 100Ω | ±5% | 2800K ±3% | (2750K) | P10536CT-ND | .49 | 2.78 | 18.07 | 4,000 | 118.95/M | ERT-J1VA101J |
| 1.0KΩ | ±5% | 4500K ±3% | (4450K) | P10537CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT102J |
| 1.5KΩ | ±5% | 4500K ±3% | (4450K) | P10538CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT152J |
| 2.0KΩ | ±5% | 4500K ±3% | (4450K) | P10539CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT202J |
| 2.2KΩ | ±5% | 4500K ±3% | (4450K) | P10540CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT222J |
| 3.0KΩ | ±5% | 4500K ±3% | (4450K) | P10541CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT302J |
| 3.3KΩ | ±5% | 4250K ±3% | (4300K) | P10544CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR332J |
| 3.3KΩ | ±5% | 4500K ±3% | (4450K) | P10542CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT332J |
| 4.7KΩ | ±5% | 4500K ±3% | (4450K) | P10543CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VT472J |
| 4.7KΩ | ±5% | 4250K ±3% | (4300K) | P10545CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR472J |
| 6.8KΩ | ±5% | 4250K ±3% | (4300K) | P10546CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR682J |
| 10KΩ | ±1% | (3375K) | 3435K ±1% | P12011CT-ND | .74 | 4.20 | 27.25 | 4,000 | 179.55/M | ERT-J1VG103FA |
| 10KΩ | ±2% | (3375K) | 3435K ±1% | P12012CT-ND | .68 | 3.88 | 25.18 | 4,000 | 164.96/M | ERT-J1VG103GA |
| 10KΩ | ±3% | (3375K) | 3435K ±1% | P12013CT-ND | .55 | 3.10 | 20.08 | 4,000 | 132.42/M | ERT-J1VG103HA |
| 10KΩ | ±3% | 4250K ±2% | (4300K) | P13707CT-ND | .53 | 2.96 | 19.27 | 4,000 | 107.73/M | ERT-J1VR103H |
| 10KΩ | ±5% | (3375K) | 3435K ±1% | P12014CT-ND | .45 | 2.52 | 16.37 | 4,000 | 107.73/M | ERT-J1VG103JA |
| 10KΩ | ±5% | 4250K ±3% | (4300K) | P10547CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR103J |
| 15KΩ | ±5% | 4250K ±3% | (4300K) | P10548CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR153J |
| 22KΩ | ±5% | 4250K ±3% | (4300K) | P10549CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR223J |
| 33KΩ | ±5% | 4250K ±3% | (4300K) | P10550CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR333J |
| 47KΩ | ±5% | 4250K ±3% | (4300K) | P10551CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR473J |
| 47KΩ | ±5% | 4050K ±2% | (4100K) | P12015CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VP473J |
| 47KΩ | ±5% | 4700K ±3% | (4750K) | P10553CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VV473J |
| 68KΩ | ±5% | 4250K ±3% | (4300K) | P10552CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VR683J |
| 68KΩ | ±5% | 4700K ±3% | (4750K) | P10554CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VV683J |
| 100KΩ | ±1% | (4330K) | 4390K ±1% | P12016CT-ND | .72 | 4.22 | 28.86 | 4,000 | 195.26/M | ERT-J1VS104FA |
| 100KΩ | ±2% | (4330K) | 4390K ±1% | P12017CT-ND | .66 | 3.89 | 26.68 | 4,000 | 180.67/M | ERT-J1VS104GA |
| 100KΩ | ±3% | (4330K) | 4390K ±1% | P12018CT-ND | .55 | 3.10 | 20.08 | 4,000 | 132.42/M | ERT-J1VS104HA |
| 100KΩ | ±5% | (4330K) | 4390K ±1% | P12019CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VV104JA |
| 100KΩ | ±5% | 4700K ±3% | (4750K) | P10555CT-ND | .44 | 2.47 | 16.06 | 4,000 | 105.49/M | ERT-J1VV104J |
| 150KΩ | ±5% | 4700K ±3 | | | | | | | | |