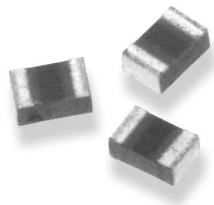


**Type 8158 Series**



Tyco Electronic Components are pleased to offer this innovative range of Micro Chip Thermistors in 0402, 0603, 0805 and 1206 packages. These specialist Surface Mount N.T.C. devices are available in initial resistances between 40 ohms and 500K ohms, with a tolerance of 5% and a B constant of either 5% or 3%, with 10K available in 2% or 1% for 0603 and 0402 packaged devices. This series has a wide operating temperature range, -40°C to +125°C. The individual chip thermistors are not value coded.

**Key Features**

- Choice of Packages (0402, 0603, 0805, 1206)
- Suitable for Pick and Place
- Operating Temperature -40°C to +125°C
- Wide Value Range
- Embossed Tape on 7" Reels

**Type 8158 Series**

**Characteristics - 04:02 Package**

| Part Number    | Resistance (R25°C) | B-Value R25/85 (K) | Rated Wattage (mW) | Operating Temperature |
|----------------|--------------------|--------------------|--------------------|-----------------------|
| 81581E400J280J | 40R                | 2800               | 40                 | -40°C to +125°C       |
| 81581E202J410J | 2K0                | 4100               | 40                 | -40°C to +125°C       |
| 81581E302J410J | 3K0                | 4100               | 40                 | -40°C to +125°C       |

**Characteristics - 06:03 Package**

| Part Number    | Resistance (R25°C) | B-Value R25/85 (K) | Rated Wattage (mW) | Operating Temperature |
|----------------|--------------------|--------------------|--------------------|-----------------------|
| 81581J400J280J | 40R                | 2800               | 150                | -40°C to +125°C       |
| 81581J101J280J | 100R               | 2800               | 150                | -40°C to +125°C       |
| 81581J501J325J | 500R               | 3250               | 150                | -40°C to +125°C       |
| 81581J102J325J | 1K0                | 3250               | 150                | -40°C to +125°C       |
| 81581J202J410J | 2K0                | 4100               | 150                | -40°C to +125°C       |
| 81581J302J410J | 3K0                | 4100               | 150                | -40°C to +125°C       |
| 81581J502J355J | 5K0                | 3550               | 150                | -40°C to +125°C       |
| 81581J103J375J | 10K                | 3750               | 150                | -40°C to +125°C       |
| 81581J153J380J | 15K                | 3800               | 150                | -40°C to +125°C       |
| 81581J203J380J | 20K                | 3800               | 150                | -40°C to +125°C       |
| 81581J303J400J | 30K                | 4000               | 150                | -40°C to +125°C       |
| 81581J503J400J | 50K                | 4000               | 150                | -40°C to +125°C       |
| 81581J104J425J | 100K               | 4150               | 150                | -40°C to +125°C       |
| 81581J154J425J | 150K               | 4250               | 150                | -40°C to +125°C       |
| 81581J204J425J | 200K               | 4250               | 150                | -40°C to +125°C       |

**Characteristics - 08:05 Package**

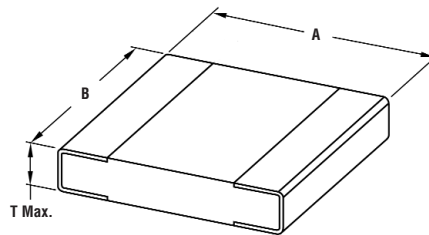
| Part Number    | Resistance (R25°C) | B-Value R25/85 (K) | Rated Wattage (mW) | Operating Temperature |
|----------------|--------------------|--------------------|--------------------|-----------------------|
| 81582A400J280J | 40R                | 2800               | 300                | -40°C to +125°C       |
| 81582A101J280J | 100R               | 2800               | 300                | -40°C to +125°C       |
| 81582A501J325J | 500R               | 3250               | 300                | -40°C to +125°C       |
| 81582A102J325J | 1K0                | 3250               | 300                | -40°C to +125°C       |
| 81582A202J410J | 2K0                | 4100               | 300                | -40°C to +125°C       |
| 81582A302J410J | 3K0                | 4100               | 300                | -40°C to +125°C       |
| 81582A502J355J | 5K0                | 3550               | 300                | -40°C to +125°C       |
| 81582A103J375J | 10K                | 3750               | 300                | -40°C to +125°C       |
| 81582A153J400J | 15K                | 4000               | 300                | -40°C to +125°C       |
| 81582A203J400J | 20K                | 4000               | 300                | -40°C to +125°C       |
| 81582A303J400J | 30K                | 4000               | 300                | -40°C to +125°C       |
| 81582A503J400J | 50K                | 4000               | 300                | -40°C to +125°C       |
| 81582A104J425J | 100K               | 4250               | 300                | -40°C to +125°C       |
| 81582A154J425J | 150K               | 4250               | 300                | -40°C to +125°C       |
| 81582A204J425J | 200K               | 4250               | 300                | -40°C to +125°C       |
| 81582A504J435J | 500K               | 4350               | 300                | -40°C to +125°C       |

Type 8158 Series

Characteristics -  
12:06 Package

| Part Number    | Resistance (R25°C) | B-Value R25/85 (K) | Rated Wattage (mW) | Operating Temperature |
|----------------|--------------------|--------------------|--------------------|-----------------------|
| 81582B101J280J | 100R               | 2800               | 400                | -40°C to +125°C       |
| 81582B501J325J | 500R               | 3250               | 400                | -40°C to +125°C       |
| 81582B102J325J | 1K0                | 3250               | 400                | -40°C to +125°C       |
| 81582B202J410J | 2K0                | 4100               | 400                | -40°C to +125°C       |
| 81582B302J410J | 3K0                | 4100               | 400                | -40°C to +125°C       |
| 81582B502J355J | 5K0                | 3550               | 400                | -40°C to +125°C       |
| 81582B103J375J | 10K                | 3750               | 400                | -40°C to +125°C       |
| 81582B153J400J | 15K                | 3750               | 400                | -40°C to +125°C       |
| 81582B203J400J | 20K                | 4000               | 400                | -40°C to +125°C       |
| 81582B303J400J | 30K                | 4000               | 400                | -40°C to +125°C       |
| 81582B503J400J | 50K                | 4000               | 400                | -40°C to +125°C       |
| 81582B104J425J | 100K               | 4250               | 400                | -40°C to +125°C       |
| 81582B154J425J | 150K               | 4250               | 400                | -40°C to +125°C       |
| 81582B204J425J | 200K               | 4250               | 400                | -40°C to +125°C       |
| 81582B504J435J | 500K               | 4350               | 400                | -40°C to +125°C       |

Dimensions



| Case Size | A±0.2 | B±0.2 | T Max. |
|-----------|-------|-------|--------|
| 0402      | 1.0   | 0.5   | 0.7    |
| 0603      | 1.6   | 0.8   | 1.0    |
| 0805      | 2.0   | 1.25  | 1.2    |
| 1206      | 3.2   | 1.6   | 1.2    |

How to Order

| 8158                    | 2A   | 103  | J         | 375  | J                    |
|-------------------------|--|--|-----------|--|----------------------|
| Common Part             | Case Size  | Resistance Value   | Tolerance | B Constant 25/85 (K)   | B Constant Tolerance |
| 8158<br>Chip Thermistor | 1E - 0402 Package<br>1J - 0603 Package<br>2A - 0805 Package<br>2B - 1206 Package | The first two digits are significant figures of resistance value and the third denotes the number of zeros following.<br><br>e.g. 100R: 101<br>10K: 103<br>100K: 104 | J - 5%    | 280 - 2800<br>325 - 3250<br>355 - 3550<br>375 - 3750<br>400 - 4000<br>410 - 4100<br>425 - 4250<br>435 - 4350 | J - 5%<br>E - 3%     |