

**Temperature Measurement**
**B57620**
**SMD NTC Thermistors with Silver Palladium Termination, Size 0805**
**C 620**


| $R_{25}$<br>$\Omega$ | No. of $R/T$<br>characteristic | $B_{25/50}$<br>K | $B_{25/85}$<br>K | $B_{25/100}$<br>K | Ordering code   |
|----------------------|--------------------------------|------------------|------------------|-------------------|-----------------|
| 10 k                 | 1011                           | 3660             | 3730             | 3730              | B57620C0103+062 |
| 22 k                 | 2003                           | 3930             | 3960             | 3980              | B57620C0223+062 |
| 47 k                 | 2101                           | 4030             | 4080             | 4100              | B57620C0473+062 |
| 100 k                | 2903                           | 4120             | 4190             | 4200              | B57620C0104+162 |
| 220 k                | 2904                           | 4230             | 4280             | 4300              | B57620C0224+062 |

+: J for  $\Delta R_N/R_N = \pm 5\%$   
 K for  $\Delta R_N/R_N = \pm 10\%$   
 M for  $\Delta R_N/R_N = \pm 20\%$

**Reliability data**

SMD NTC thermistors are tested in accordance with IEC 60068. The parts are mounted on a standardized PCB in accordance with IEC 60539-1.

| Test                               | Standard                     | Test conditions                                                                                                                                                                                                      | $\Delta R_{25}/R_{25}$<br>(typical) | Remarks                     |
|------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------|
| Storage in dry heat                | IEC 60068-2-2<br>JIS C 0021  | Storage at upper category temperature<br>$T: (125 \pm 2)^\circ\text{C}$<br>$t: 1000\text{ h}$                                                                                                                        | $< 3\%$ /<br>$< 6\%$ <sup>1)</sup>  |                             |
| Storage in damp heat, steady state | IEC 60068-2-3<br>JIS C 0022  | Temperature of air: $(40 \pm 2)^\circ\text{C}$<br>Relative humidity of air:<br>$(93 +2/-3)\%$<br>Duration: 21 days                                                                                                   | $< 3\%$                             | No visible damage           |
| Rapid temperature cycling          | IEC 60068-2-14<br>JIS C 0025 | Lower test temperature: $-55^\circ\text{C}$<br>Upper test temperature: $125^\circ\text{C}$<br>Number of cycles: 10                                                                                                   | $< 3\%$                             |                             |
| Endurance                          |                              | $P_{\text{max}}$ : 210 mW<br>$T: (65 \pm 2)^\circ\text{C}$<br>$t: 1000\text{ h}$                                                                                                                                     | $< 5\%$                             |                             |
| Solderability                      | IEC 60068-2-58<br>JIS C 0054 | Solderability:<br>$(215 \pm 3)^\circ\text{C} / (3 \pm 0,3)\text{ s}$<br>$(235 \pm 5)^\circ\text{C} / (2 \pm 0,2)\text{ s}$<br><br>Resistance to soldering heat:<br>$(260 \pm 5)^\circ\text{C} / (10 \pm 1)\text{ s}$ |                                     | 95 % of terminations wetted |
| Resistance drift after soldering   |                              | Reflow soldering profile<br>Wave soldering profile                                                                                                                                                                   | $< 5\%$                             |                             |

1) The higher value applies to 220  $\Omega$ –1 k $\Omega$  types.