



NTC Thermistor

PRODUCT DATA

Temperature Compensation/Sensing TTR Series (Ring Type)

Features

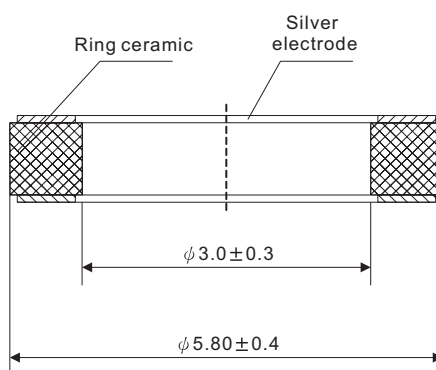
1. Washer shape Leadless discs
2. -40 ~ +125 °C operating temperature range
3. Suitable for clamp contact

Recommended applications

1. Automotive electronic



Dimensions



(Unit: mm)

Characteristics

Part no.	Zero power resistance at 25°C (KΩ)	Tolerance of resistance (±%)	B value (K)	Tolerance of B value (±%)	Max. power rating at 25°C (mW)	Thermal dissipation constant (mW/°C)	Thermal time constant (Sec.)	Operating temperature range (°C)
TTR-471	0.47	5 · 10 · 15	25/85	3 · 5	240	≥4.0	≤50	-40 ~ +125
TTR-501	0.50							
TTR-551	0.55							
TTR-601	0.60							
TTR-681	0.68							
TTR-701	0.70							
TTR-202	2.0							
TTR-222	2.2							
TTR-223	2.3							
TTR-502	5.0							
TTR-802	8.0							
TTR-103	10.0							



● **Reliability test**

Item	Test conditions/methods	Specifications															
High Temperature Storage	125±5°CX1000 HRS	No visible damage Δ R/R ≤ 5 %															
Thermal Shock	<p>The thermal shock conditions shown below shall be repeated 5 cycles</p> <table border="1" data-bbox="325 629 1153 775"> <thead> <tr> <th data-bbox="325 629 614 663">Step</th> <th data-bbox="614 629 903 663">Temperature (°C)</th> <th data-bbox="903 629 1153 663">Period (minutes)</th> </tr> </thead> <tbody> <tr> <td data-bbox="325 663 614 689">1</td> <td data-bbox="614 663 903 689">-40±5</td> <td data-bbox="903 663 1153 689">30±3</td> </tr> <tr> <td data-bbox="325 689 614 716">2</td> <td data-bbox="614 689 903 716">Room temperature</td> <td data-bbox="903 689 1153 716">5±3</td> </tr> <tr> <td data-bbox="325 716 614 743">3</td> <td data-bbox="614 716 903 743">125±5</td> <td data-bbox="903 716 1153 743">30±3</td> </tr> <tr> <td data-bbox="325 743 614 770">4</td> <td data-bbox="614 743 903 770">Room temperature</td> <td data-bbox="903 743 1153 770">5±3</td> </tr> </tbody> </table>	Step	Temperature (°C)	Period (minutes)	1	-40±5	30±3	2	Room temperature	5±3	3	125±5	30±3	4	Room temperature	5±3	No visible damage Δ R/R ≤ 3 %
Step	Temperature (°C)	Period (minutes)															
1	-40±5	30±3															
2	Room temperature	5±3															
3	125±5	30±3															
4	Room temperature	5±3															
Life Test	25±5°C,PmaxX1000 HRS	No visible damage Δ R/R ≤ 5 %															