

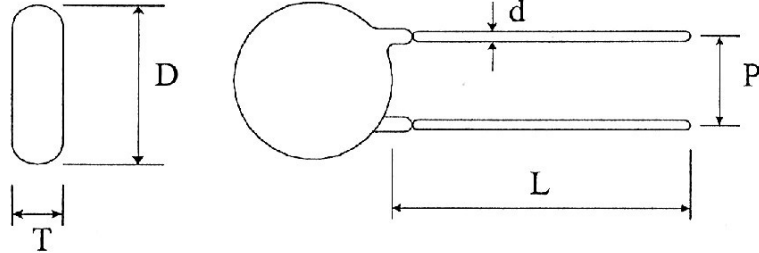
## NTC Disc Thermistors

### Description

A range of miniature disc thermistors for general purpose applications such as temperature compensation circuitry. The thermistors are clearly coded and have a wide working temperature range of -30 to +125°C and a electrical tolerance of 10%.

### Dimensions

Item	Dimension (mm)
Disc	5
D (max)	6.5
L (min)	31
d	0.5 ± 1
p	3.5 ± 1
T (max)	5



### General Information

Body Material	:	Epoxy Resin Coated
Lead Material	:	Tinned Copper Wires
Coating Colour	:	Green
Marking Colour	:	Black

### Electrical Characteristics

Parameter	Symbol	Test Conditions	Unit	Rapid Order Code				
				61-0400 TTC301A	61-0405 TTC102A	61-0410 TTC502A	61-0415 TTC203A	61-0420 TTC104A
Typical Resistance @ 25°C	R <sub>25</sub>	Ta=25°C ± 0.1°C I<0.5mA	Ω	300	1K	5K	20K	100K
Resistance @ 50°C	R <sub>50</sub>	Ta=50°C ± 0.1°C I<0.5mA	Ω	121	0.373K	1.794K	6.64K	31.936K
R <sub>25</sub> /R <sub>50</sub>	K	-	-	2.479	2.679	2.786	3.011	3.131
B Constant	B	(8876 Log K)	K	3500	3800	3950	4250	4400
Thermal Dissipation Constant	C	Ta=25°C ± 0.1°C	mW/°C	9	9	9	9	8
Thermal Time Constant	-	Ta=25°C ± 0.1°C	Sec	22	22	21	23	24
Insulation Test	-	1000VDC / 1 min	Ω	500M	500M	500M	500M	500M


### Absolute Maximum Ratings

Operation Temperature Range	°C	-30 to +125
Max Permissible Current	mA	115    70    30    20    10
Max Operating Current	mA	10    7    3    2    1

### Mechanical Characteristics

Leads Terminal Tensile Strength		
Conditions	Test Result	
Fasten body with a load applied to each lead 1 kg for 5 sec's	No break out or damage	OK

Leads Terminal Bend Strength		
Conditions	Test Result	
Fix body and hang 0.3kg on one terminal bend to 90° and then back, repeat in opposite direction	No break out or damage	OK

	<b>NTC Disc Thermistors</b>	<b>See Table</b>	Revision B
	The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.		11/02/2002
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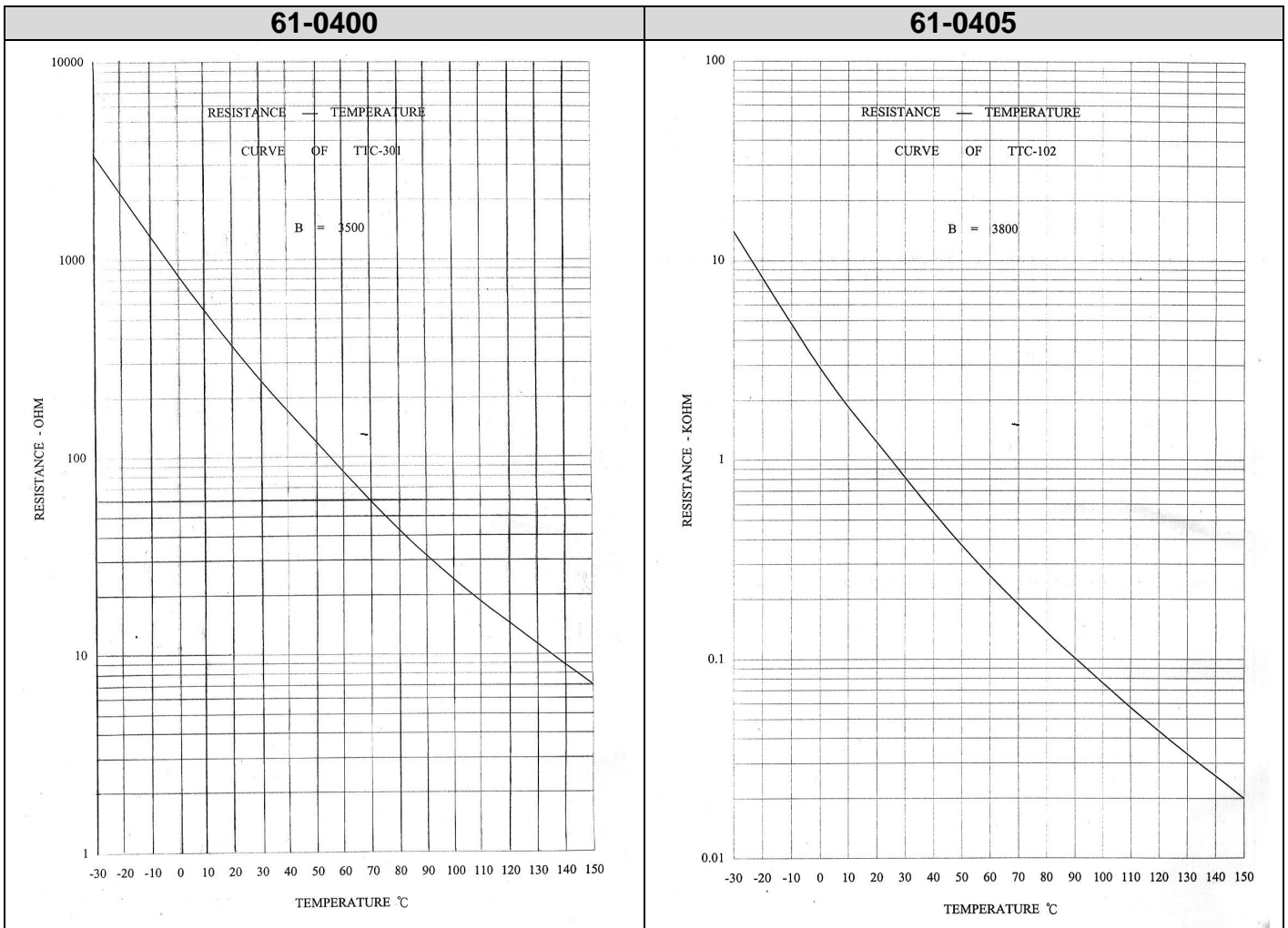
Item	Test Conditions	Variable
Temp. Cycle Test	-30°C X 30 -> +25°C X 5 +125°C X 30 -> +25°C X 5 } x 10	Within ± 10%
Humidity Test	45°C 95% RH X 1000 Hrs	Within ± 10%
Life Test	10mA x 1000 Hrs	Within ± 10%
Insulation Test	DC 1000 V	>= 500MΩ

Approval Information

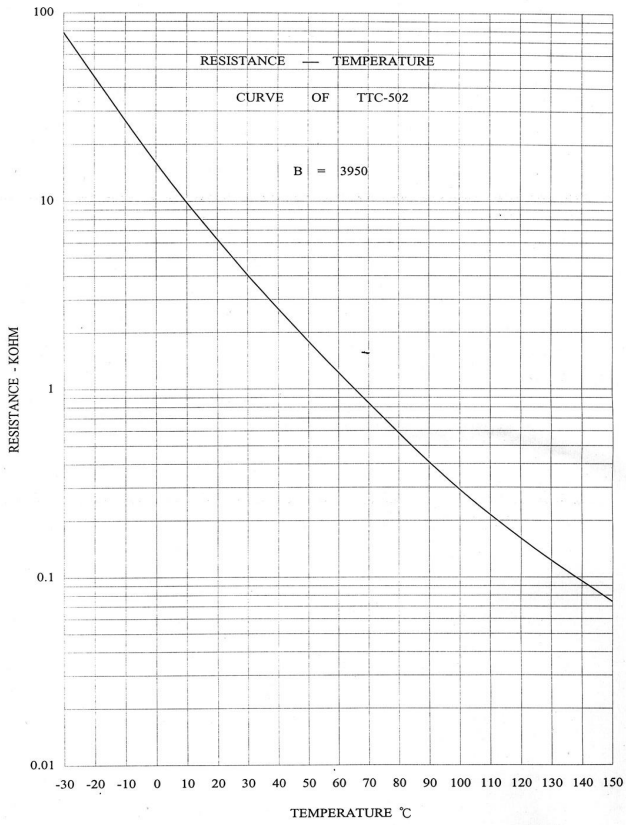
CSA : File No. LR97495  
 UL\* : File No. E138827\*

\* - only applicable to 61-0405 (TTC102), 61-0410 (TTC502).

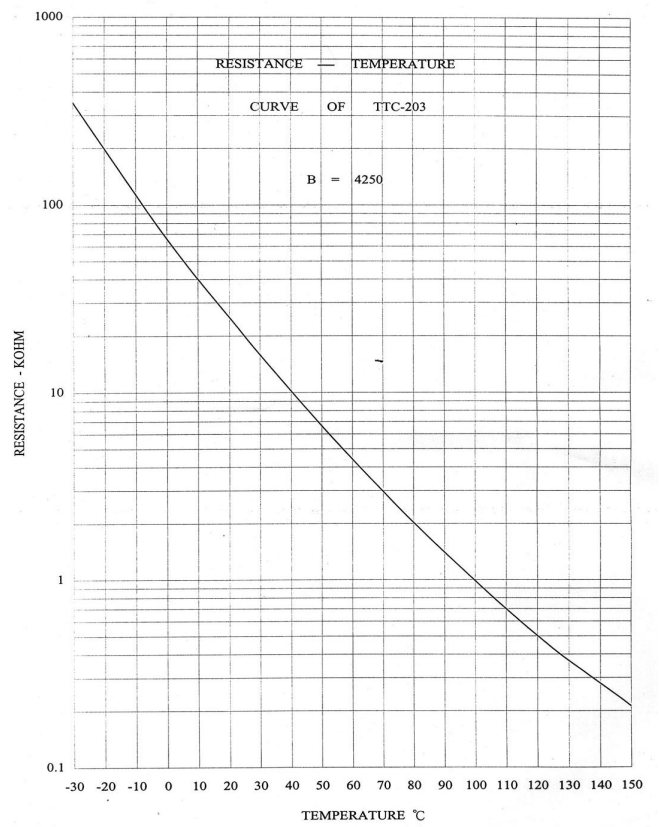
Graphs (Resistance v Temperature)



### 61-0410



### 61-0415



### 61-0420

