

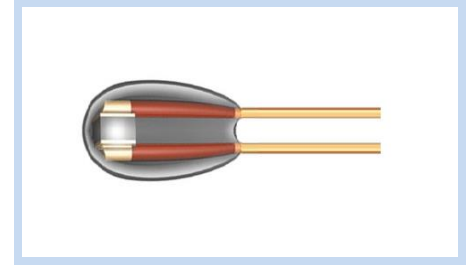
# NTC Thermistor Glass Encapsulated Type

NTG Series

MERITEK

## FEATURE

- Temperature Sensing/Compensation
- Glass-Encapsulated and Heat Resistant
- Applications: Home Appliances, Automotive Electronics
- UL Safety Approved: Certification No: E223027



## ELECTRICAL CHARACTERISTICS

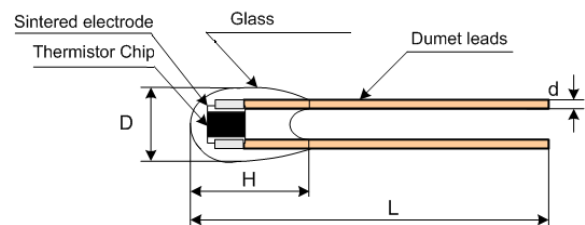
Part No.	Zero Power Resistance	B Value	Max. Power Dissipation at 25°C	Dissipation Factor $\delta$	Thermal Time Constant
	( $\Omega$ )	(K)	(mW)	(mW/°C)	(Sec.)
NTGB332G397H	R100=3.30K $\pm$ 2%	B0/100 3970 $\pm$ 3%	7	Approx. 1.4	Approx. 14
NTGB332H397H	R100=3.30K $\pm$ 3%				
NTGB332J397H	R100=3.30K $\pm$ 5%				
NTGB503G397H	R25=50K $\pm$ 2%				
NTGB503H397H	R25=50K $\pm$ 3%				
NTGB503J397H	R25=50K $\pm$ 5%	B100/200 4300 $\pm$ 3%	7	Approx. 1.4	Approx. 14
NTGC551G430H	R200=0.55K $\pm$ 2%				
NTGC551H430H	R200=0.55K $\pm$ 3%				
NTGC551J430H	R200=0.55K $\pm$ 5%				
NTGC104G430H	R25=100K $\pm$ 2%				
NTGC104H430H	R25=100K $\pm$ 3%	B25/85 3975 $\pm$ 1.5%	7	Approx. 1.4	Approx. 14
NTGC104J430H	R25=100K $\pm$ 5%				
NTGA103G39HA	R25=10K $\pm$ 2%				
NTGA103H39HA	R25=10K $\pm$ 3%	B25/85 3975 $\pm$ 1.5%	7	Approx. 1.4	Approx. 14
NTGA103J39HA	R25=10K $\pm$ 5%				

Note:

1. Operating Temperature: -40°C~+250°C
2. Special Specifications are available upon request, 2. Tolerance Code: G: $\pm$ 2%, H: $\pm$ 3%, J: $\pm$ 5%

## DIMENSIONS

Series	Value (mm)
D	2.5 $\pm$ 0.2
H	3.8 $\pm$ 0.5
L	$\geq$ 40
d	0.30 $\pm$ 0.02



## PART NUMBERING SYSTEM

NTG   A   332   G   397   H  
 (1)   (2)   (3)   (4)   (5)   (6)

No	Item	Code	Description
(1)	Meritek Series	NTG	Thermistor Series, Glass Encapsulated, $\Phi$ 2.5 mm Type
(2)	B Value Type	A	A: B25/85      B: B0/100, C :B100/200
(3)	Zero Power Resistance	332G	332: 3.3K $\Omega$ $\pm$ 2% (G)      First two digits: significant, Third: Multiplier
(4)	B Value	397H	397: 3970 $\pm$ 3% (H)      39H: 3975, 430: 4300

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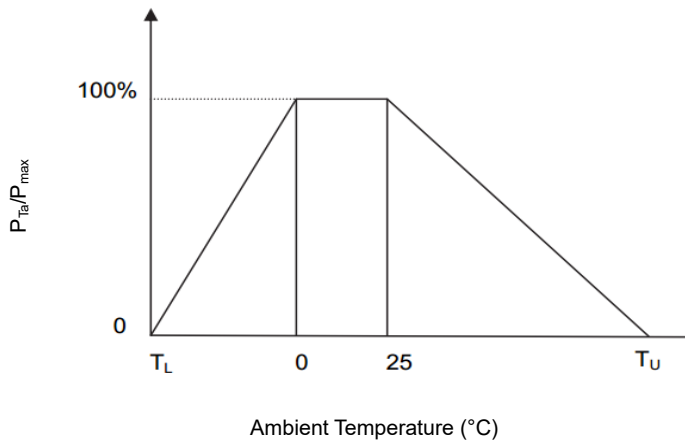
**MERITEK**

## RELIABILITY TEST CONDITON AND REQUIREMENT

Item	Standard	Test conditions / Methods	Specifications															
High Temperature Storage	IEC 60068-2-2	$T_u \pm 5^\circ\text{C}$ , 1000 $\pm$ 24 hrs	No visible damage $ \Delta R_{25}/R_{25}  \leq 5\%$															
Damp Heat, Steady State	IEC 60068-2-78	$40 \pm 2^\circ\text{C}$ , 90~95% RH, 1000 $\pm$ 24 hrs	No visible damage $ \Delta R_{25}/R_{25}  \leq 3\%$															
Rapid Change of Temperature	IEC 60068-2-14	The conditions shown below shall be repeated 5 cycles. <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (<math>^\circ\text{C}</math>)</th> <th>Period (minutes)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><math>T_L \pm 5</math></td> <td><math>30 \pm 3</math></td> </tr> <tr> <td>2</td> <td>Room Temperature</td> <td><math>5 \pm 3</math></td> </tr> <tr> <td>3</td> <td><math>T_U \pm 5</math></td> <td><math>30 \pm 3</math></td> </tr> <tr> <td>4</td> <td>Room Temperature</td> <td><math>5 \pm 3</math></td> </tr> </tbody> </table>	Step	Temperature ( $^\circ\text{C}$ )	Period (minutes)	1	$T_L \pm 5$	$30 \pm 3$	2	Room Temperature	$5 \pm 3$	3	$T_U \pm 5$	$30 \pm 3$	4	Room Temperature	$5 \pm 3$	No visible damage $ \Delta R_{25}/R_{25}  \leq 3\%$
Step	Temperature ( $^\circ\text{C}$ )	Period (minutes)																
1	$T_L \pm 5$	$30 \pm 3$																
2	Room Temperature	$5 \pm 3$																
3	$T_U \pm 5$	$30 \pm 3$																
4	Room Temperature	$5 \pm 3$																
Max. Power Dissipation	IEC 60539-1 4.26.3	$25 \pm 5^\circ\text{C}$ , $P_{\text{max}}$ . X 1000 $\pm$ 24 hrs	No visible damage $ \Delta R_{25}/R_{25}  \leq 5\%$															

## MAX POWER DISSIPATION DERATING CURVE

Power Derating Curve



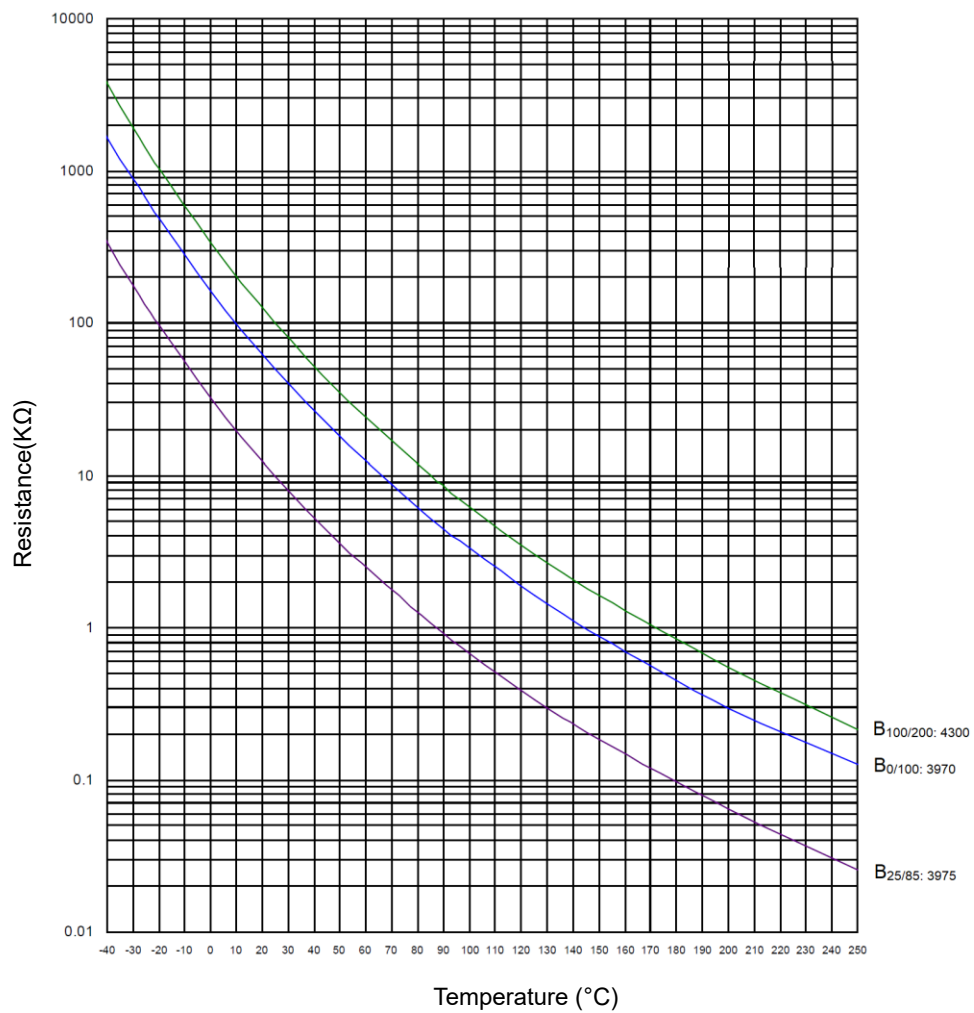
Item	Description
$T_U$	Maximum Operating Temperature ( $^\circ\text{C}$ )
$T_L$	Minimum Operating Temperature ( $^\circ\text{C}$ )
<b>Example</b>	Ambient Temperature ( $T_a$ ) = $60^\circ\text{C}$ Max Operating Temperature ( $T_U$ ) = $200^\circ\text{C}$ $P_{Ta} = (T_U - T_a) / (T_U - 25) \times P_{max} = 80\% P_{max}$

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## R-T CHARACTERISTIC CURVES



\*Specifications subject to change without notice.