



## POWrTherm™ BN-LG05Y Series Features

- Power NTC thermistor for Inrush Current Limiting (ICL)
- 5 mm disc diameter with wide resistance range
- Highly stable electrical characteristics
- Flame retardant coating material meets UL 94V-0 requirements
- RoHS\* compliant and halogen free\*\*
- Agency recognition: c us



## BN-LG05Y Series – Power NTC Thermistors for ICL

### Electrical Characteristics

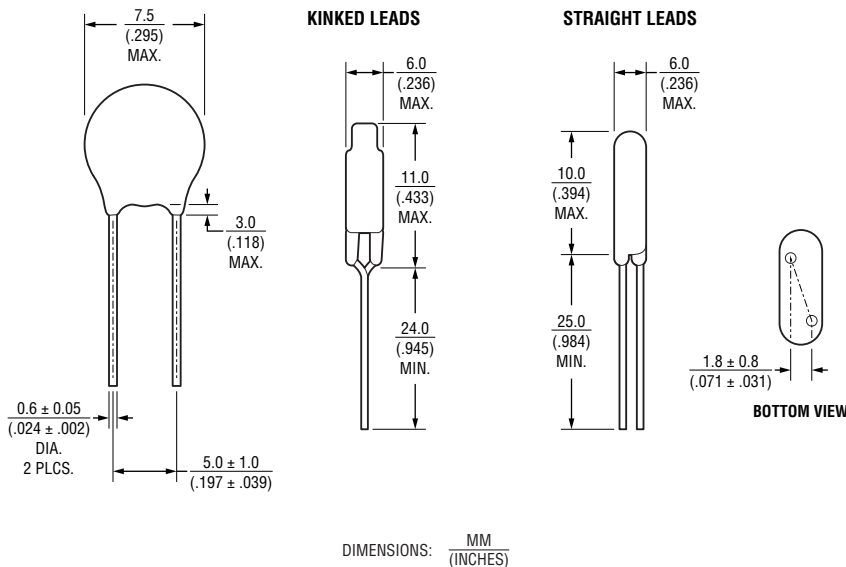
Model	Resistance @ 25 °C (Ω)	Resistance Tolerance <sup>1</sup>	I <sub>max</sub> (A)	R <sub>imax</sub> @ 25 °C (Ω)	Max. Load Capacitance @ 240 VAC (μF)	P <sub>max</sub> (W)	Dissipation Factor Typical δ (mW/°C)	Thermal Time Constant Typical (sec.)	Operating Temperature Range (°C)
BN-LG05Y3R0Mx	3.0	±20 %	3.0	0.220	100	1.6	Approx. 13	Approx. 25	-40 to +150
BN-LG05Y4R0Mx	4.0	±20 %	2.0	0.350					
BN-LG05Y5R0Mx	5.0	±20 %	2.0	0.417					
BN-LG05Y7R0Mx	7.0	±20 %	1.2	0.554					
BN-LG05Y8R0Mx	8.0	±20 %	1.0	0.911	68				
BN-LG05Y100Mx	10.0	±20 %	1.0	0.975	100				
BN-LG05Y120Mx	12.0	±20 %	1.0	1.188	68				
BN-LG05Y200Mx	20.0	±20 %	0.3	5.600	100				

Notes:

"x" denotes lead type. "Y" = Kinked, "S" = Straight.

<sup>1</sup> ±15 % resistance tolerance is available upon request.

### Product Dimensions



### Additional Information

Click these links for more information:

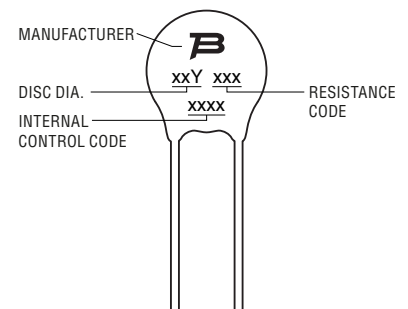


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### Agency Recognition

c us ..... File number: [E307915](#)

### Typical Part Marking



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Users should verify actual device performance in their specific applications.

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# BN-LG05Y Series – Power NTC Thermistors for ICL



## Environmental Characteristics

Storage Conditions  
 Temperature.....+15 °C to +40 °C  
 Humidity.....20 to 70 %  
 Moisture Sensitivity Level..... 1

## Standard Packaging Quantities

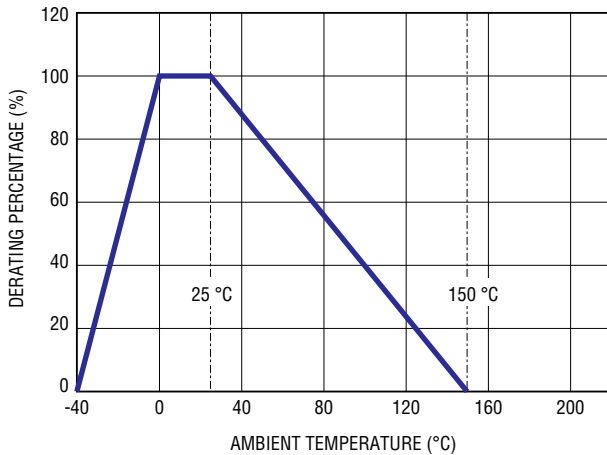
<b>Bulk</b>	5,000 pcs./box
<b>Tape &amp; Reel</b>	1,500 pcs./reel
<b>Ammo Pack</b>	1,000 pcs./box

## How to Order

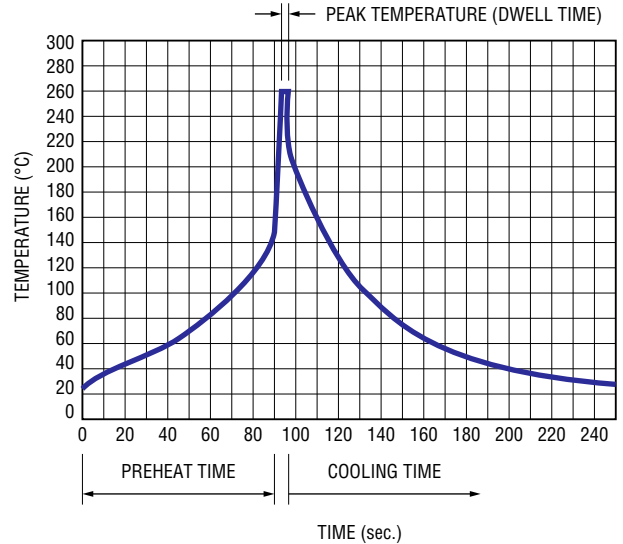
**BN - LG 05Y 2R5 M Y B**

POWTherm™ Product Designator \_\_\_\_\_  
 Series \_\_\_\_\_  
 LG = For Inrush Current Limiting (ICL)  
 Disc Diameter \_\_\_\_\_  
 05Y = 5 mm  
 Resistance @ 25 °C \_\_\_\_\_  
 2R5 = 2.5 Ω  
 100 = 10 Ω  
 Tolerance of R<sub>25</sub> \_\_\_\_\_  
 L = ±15 %  
 M = ±20 %  
 Lead Type \_\_\_\_\_  
 Y = Kinked  
 S = Straight  
 Packaging Type \_\_\_\_\_  
 B = Bulk  
 R = Tape & Reel  
 M = Ammo Pack

## I<sub>max</sub> Derating vs. Ambient Temperature Curves



## Solder Reflow Recommendations



Profile Feature	Pb-Free Assembly
Preheat Temperature Max. (T <sub>smax</sub> )	150 °C
Time (t <sub>s</sub> ) from (T <sub>smin</sub> to T <sub>smax</sub> )	60~90 seconds
Solder Pot Temperature	260 °C max.
Solder Dwell Time	2-3 seconds

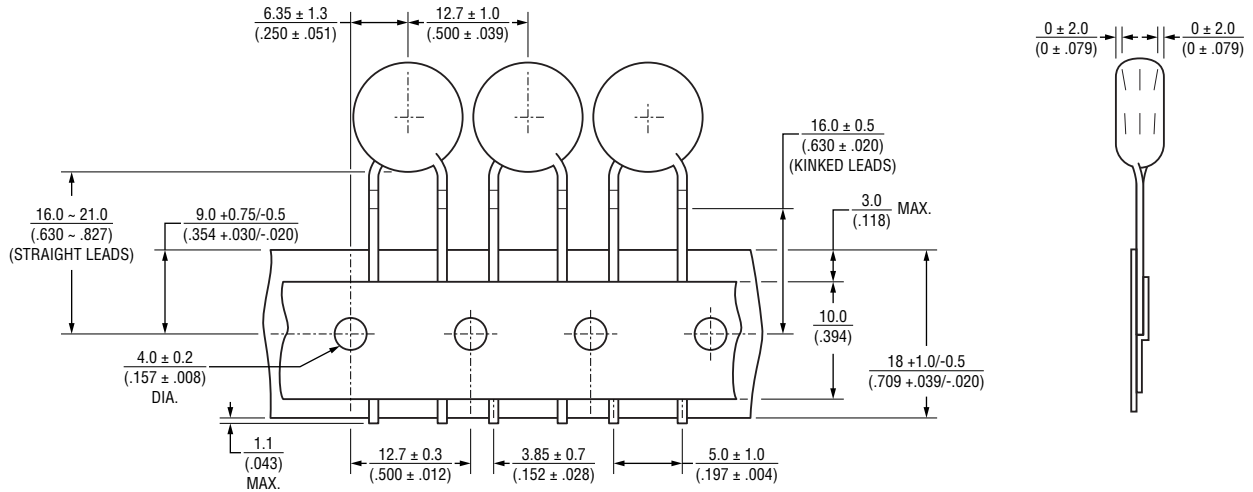
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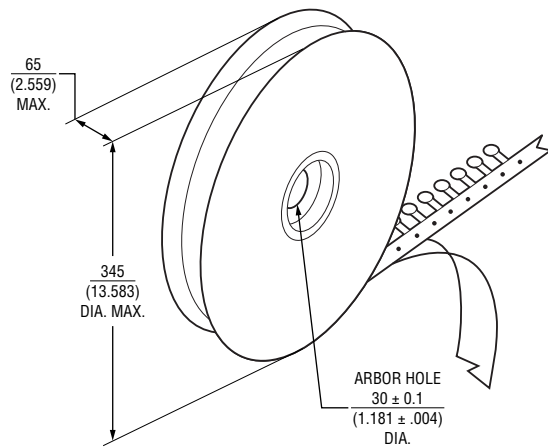
**BOURNS®**

## Packaging Specifications

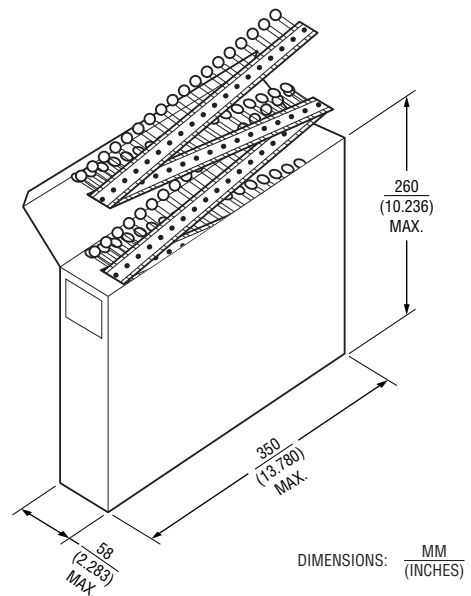
Tape



Reel



Ammo Pack



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