

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 UL us

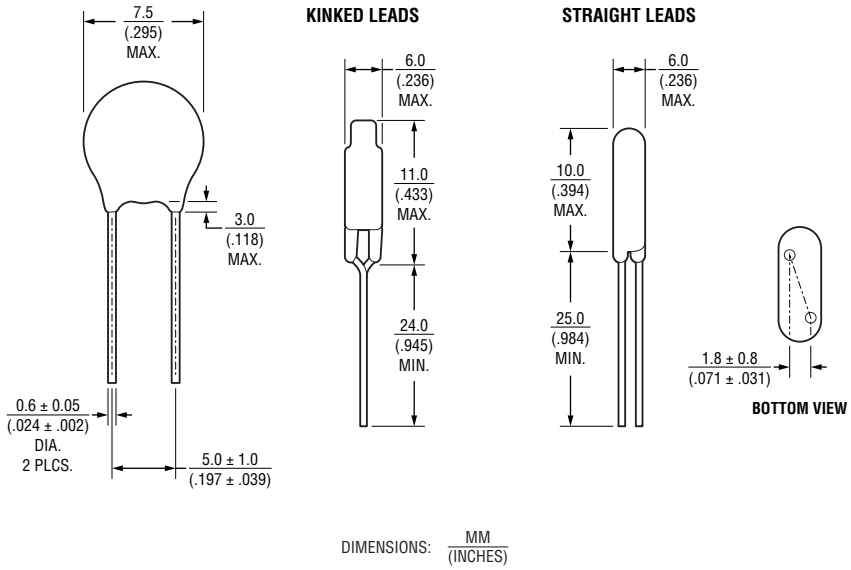
BN-LG05Y Series – Power NTC Thermistors for ICL

Electrical Characteristics

Model	Resistance @ 25 °C (Ω)	Resistance Tolerance[1]	I_{max} (A)	R_{Imax} @ 25 °C (Ω)	Max. Load Capacitance @ 240 VAC (µF)	P_{max} (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.
[1] ±15 % resistance tolerance is available upon request.

Product Dimensions



Additional Information

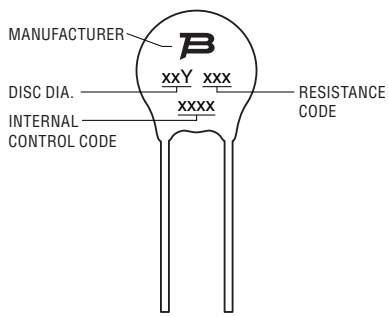
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Agency Recognition

c UL us ..... File number: E307915

Typical Part Marking



WARNING Cancer and Reproductive Harm - 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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Environmental Characteristics

Storage Conditions
- Temperature ..... +15 °C to +40 °C
- Humidity ..... 20 to 70 %

Moisture Sensitivity Level 1

Standard Packaging Quantities

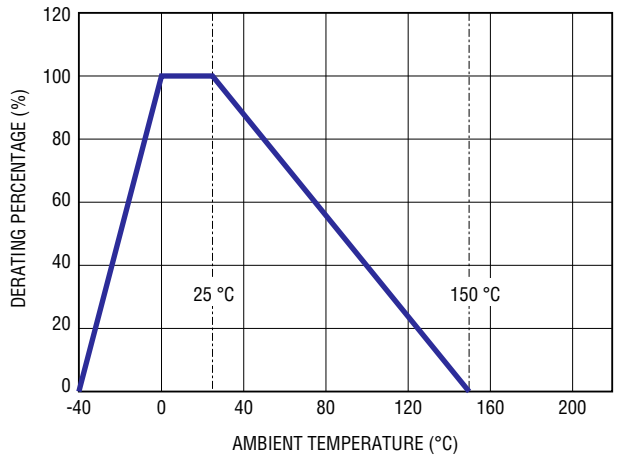
Bulk	5,000 pcs./box
Tape & Reel	1,500 pcs./reel
Ammo Pack	1,000 pcs./box

How to Order

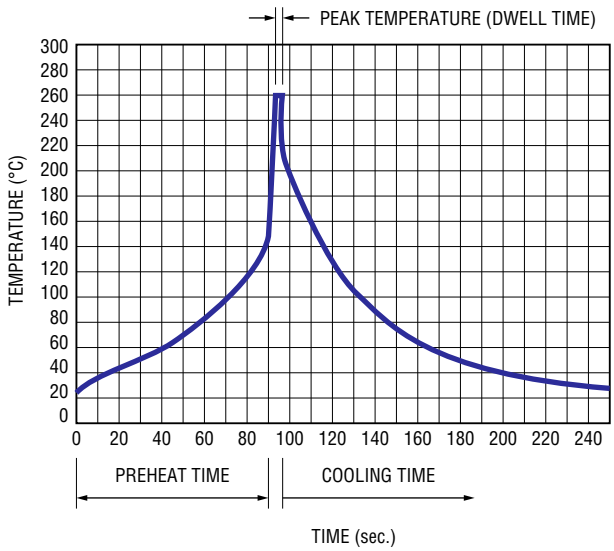
BN - LG 05Y 2R5 M Y B

- POWrTherm™ 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_{25}
  - L = ±15 %
  - M = ±20 %
- Lead Type
  - Y = Kinked
  - S = Straight
- Packaging Type
  - B = Bulk
  - R = Tape & Reel
  - M = Ammo Pack

I_{max} Derating vs. Ambient Temperature Curves



Solder Reflow Recommendations



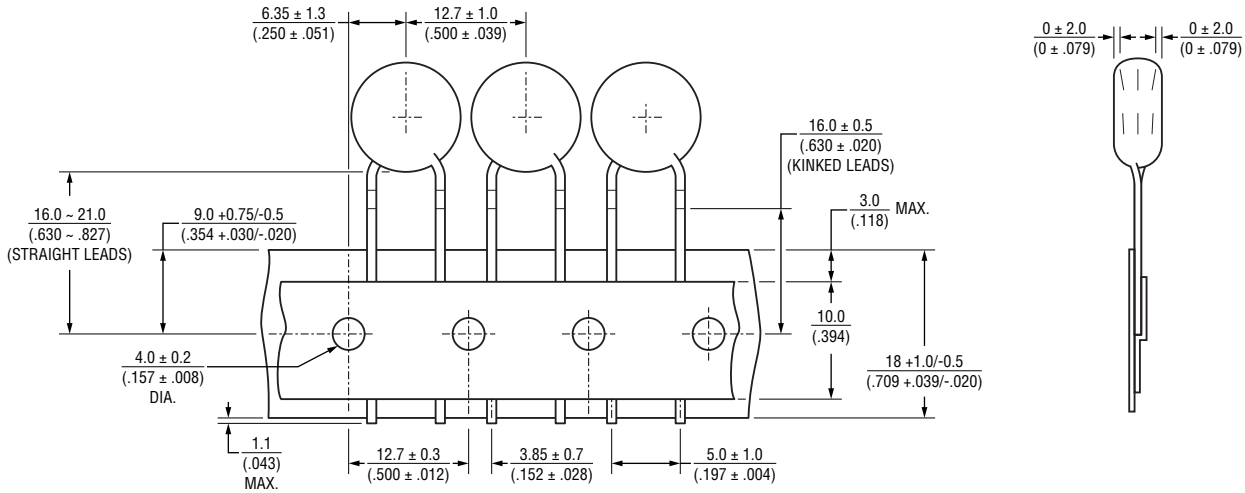
Profile Feature	Pb-Free Assembly
Preheat Temperature Max. (T_{smax}) Time (t_s) from (T_{smin} to T_{smax})	 150 °C 60~90 seconds
Solder Pot Temperature	260 °C max.
Solder Dwell Time	2-3 seconds

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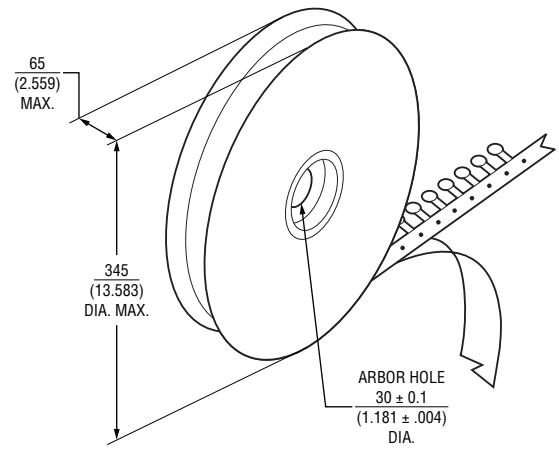
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Packaging Specifications

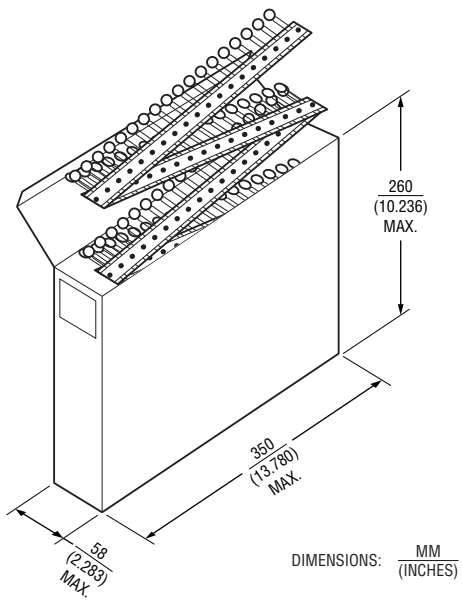
Tape



Reel



Ammo Pack



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