



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: cULus



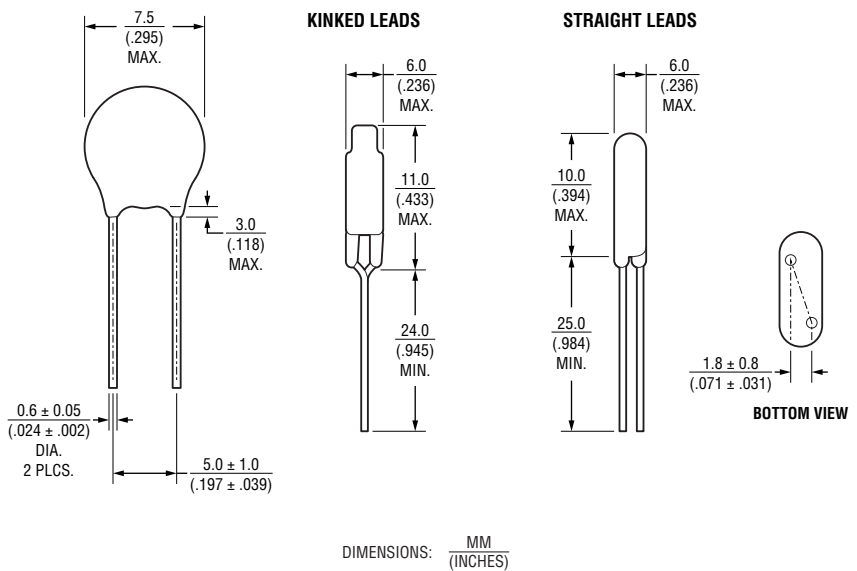
BN-LG05Y Series – Power NTC Thermistors for ICL

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} Typical (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

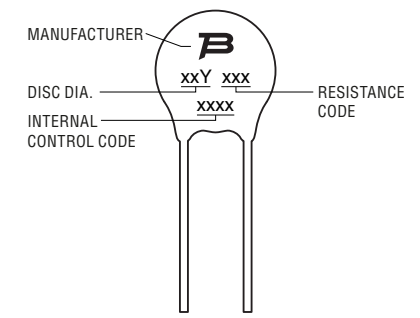
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Agency Recognition

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

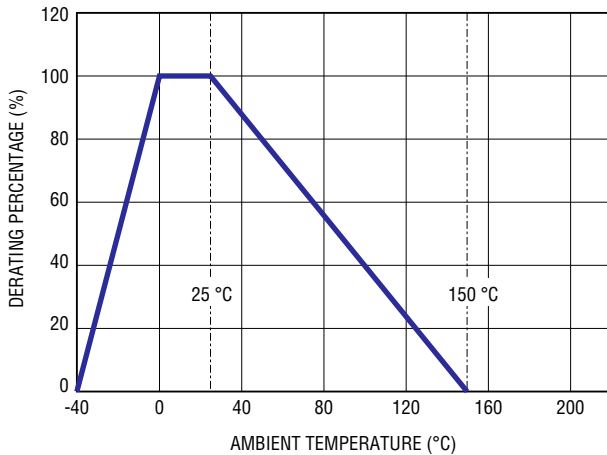
Bulk	5,000 pcs./box
Tape & Reel	1,500 pcs./reel
Ammo Pack	1,000 pcs./box

How to Order

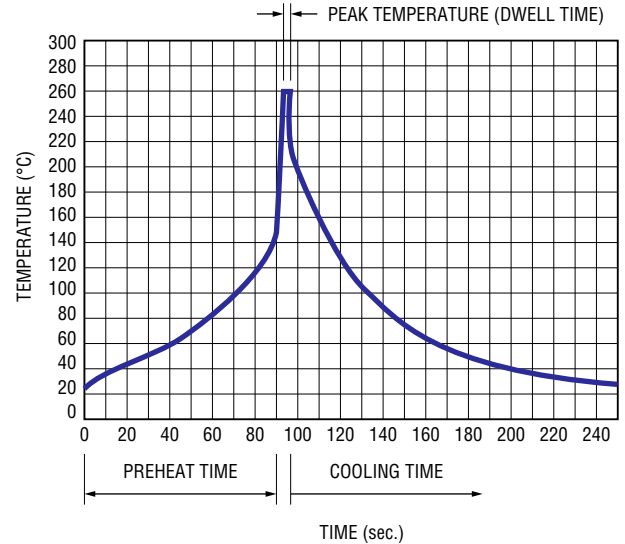
BN - LG 05Y 2R5 M Y B

POWrrTherm™ 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 R₂₅ _____
 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})	150 °C
Time (t _s) from (T _{smin} to T _{smax})	60~90 seconds
Solder Pot Temperature	260 °C max.
Solder Dwell Time	2-3 seconds

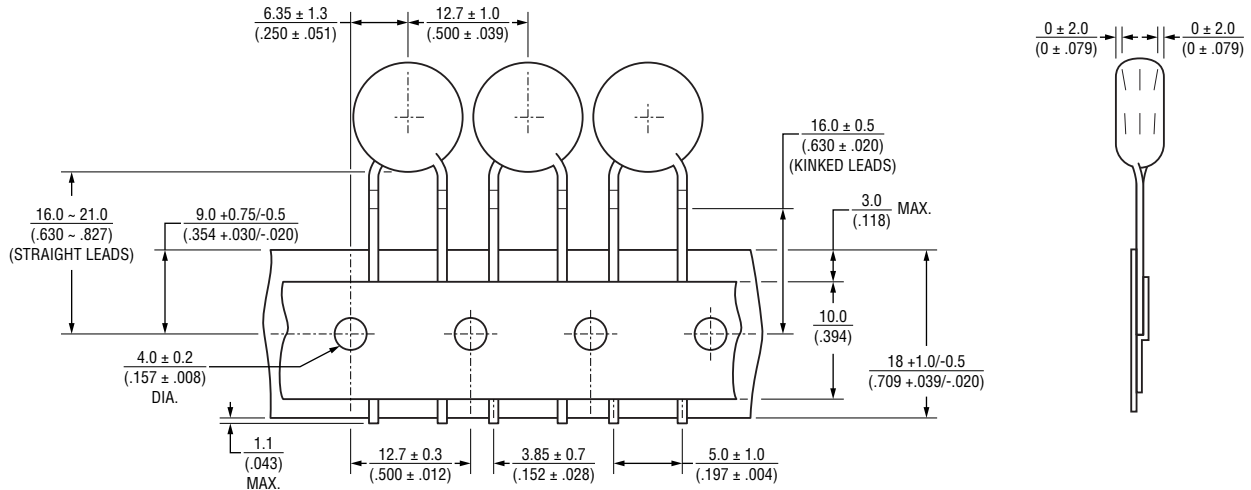
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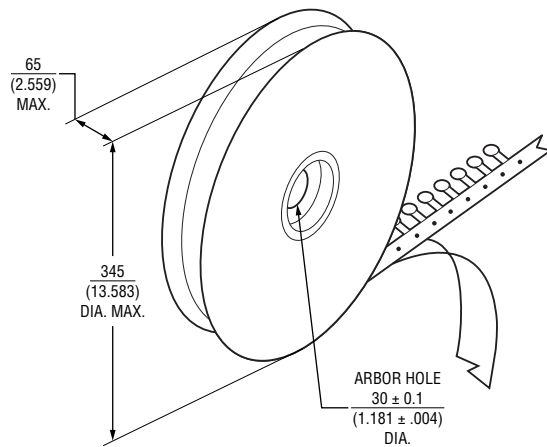
BOURNS®

Packaging Specifications

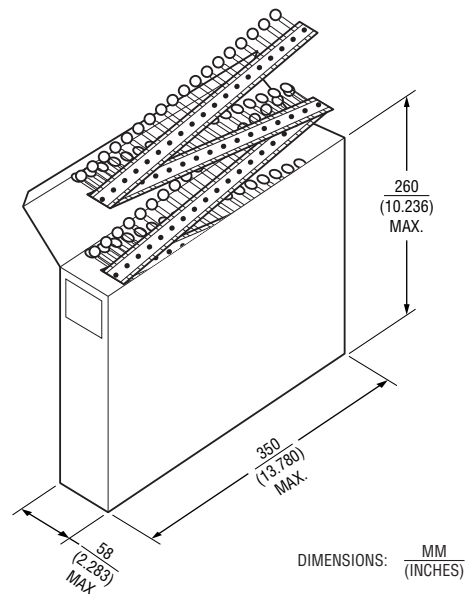
Tape



Reel



Ammo Pack



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