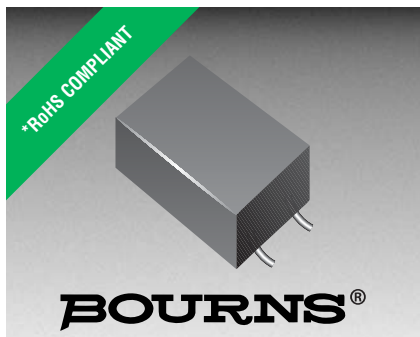




## Features

- RoHS compliant\*
- Sector windings
- Wide frequency range over 500 MHz
- Rated current 0.1 to .025 A
- High quality toroidal core

## Applications

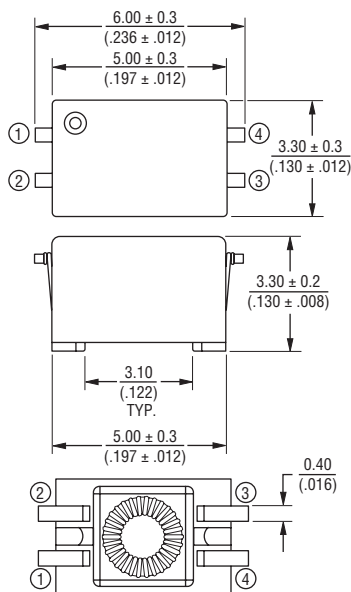
- For the suppression of EMI in data and signal lines, e.g. CAN Bus

# DR221 Series Surface Mount Data Line Chokes

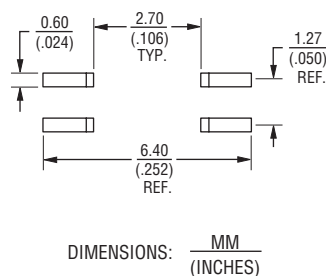
## Electrical Characteristics (@ 25 °C)

| Bourns Part Number | L1, L2 @ 10kHz, 0.1 Vrms (μH) | Freq. Range (MHz) | Impedance Min. (Ω) | RDC (Ω) (Each Winding) |      | Rated Current (mA) |
|--------------------|-------------------------------|-------------------|--------------------|------------------------|------|--------------------|
|                    |                               |                   |                    | Max.                   | Typ. |                    |
| DR221-113AE        | 11.0 +50 %/-30 %              | 100~500           | 450                | 0.18                   | 0.13 | 250                |
| DR221-223AE        | 22.0 +50 %/-30 %              | 40~300            | 900                | 0.23                   | 0.17 | 250                |
| DR221-333AE        | 33.0 +50 %/-30 %              | 30~250            | 1000               | 0.27                   | 0.20 | 200                |
| DR221-513AE        | 50.0 +50 %/-30 %              | 20~150            | 1400               | 0.32                   | 0.24 | 200                |
| DR221-474AE        | 470 +50 %/-30 %               | 2.5~60            | 1100               | 0.35                   | 0.28 | 100                |

## Product Dimensions

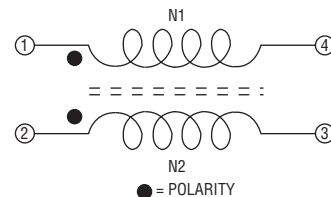


## Recommended PCB Layout



Rated Voltage .....50 Vdc/100 Vac (ref.)  
 Hipot (1 sec.).....500 Vac/60 Hz, 3 mA  
 Operating Temperature ....-40 to +125 °C  
 Storage Temperature .....-40 to +125 °C  
 Temperature Rise  
 .....25 °C max. at rated current  
 Resistance to Solder Heat  
 .....260 °C 10 sec.  
 Core .....Ferrite  
 Wire .....Enamelled copper wire (Class F)  
 Base .....LCP (UL 94V-0)  
 Terminal .....Cu/Ni/Sn  
 Adhesive.....Epoxy resin  
 Weight .....2 g  
 Packaging .....500 pcs. per reel

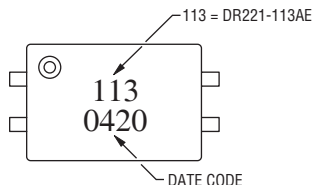
## Schematic



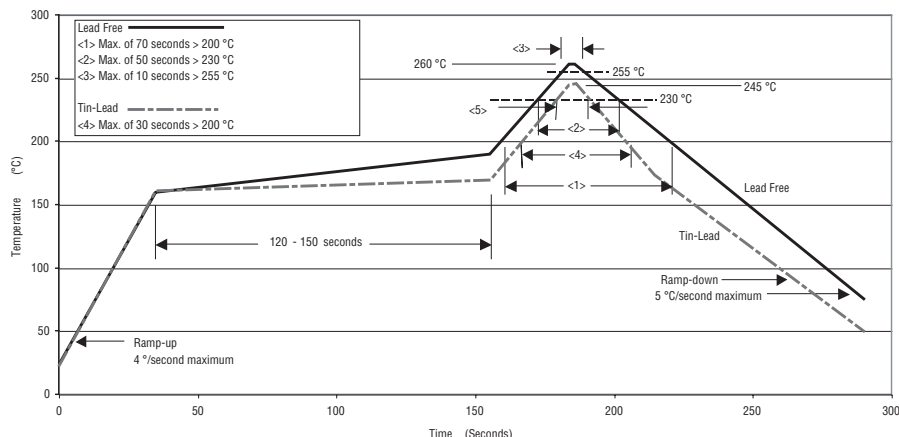
## How to Order

Model **DR221 - 513 AE**  
 Value/Tolerance .....  
 See Model-Value Table  
 Termination .....  
 AE = Cu/Ni/Sn (Lead Free)

## Typical Part Marking



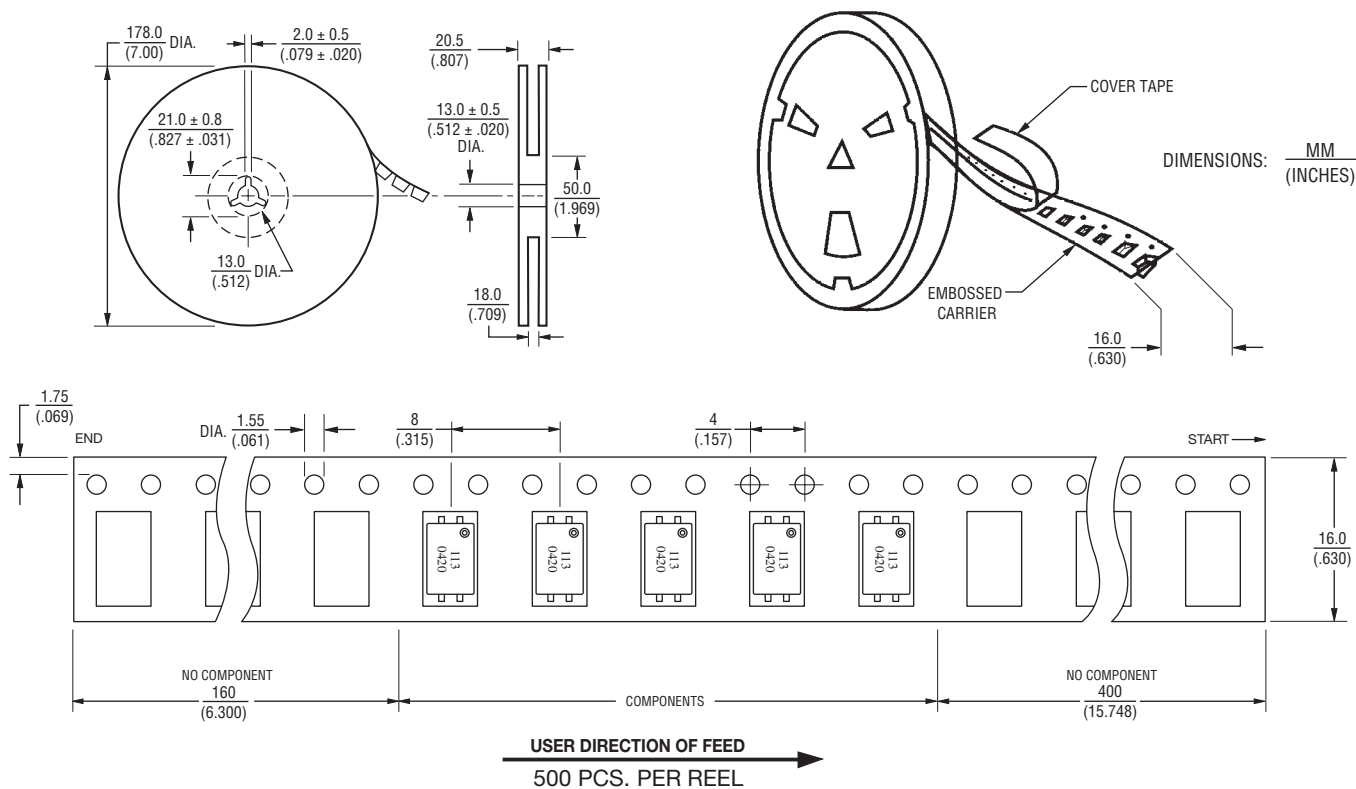
## Solder Profile



\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# DR221 Series Surface Mount Data Line Chokes

## Packaging Specifications



## Impedance vs. Frequency

