

### Features

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

### Applications

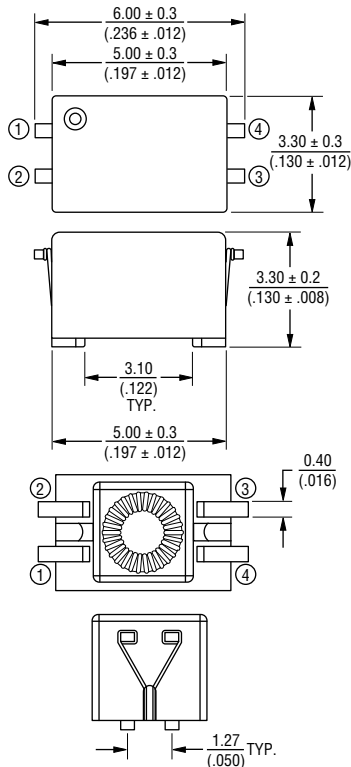
- For the suppression of EMI in data and signal lines

## DR221 Series Surface Mount Data Line Chokes

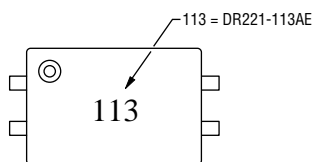
### Electrical Specifications @ 25 °C

Bourns Part No.	L1, L2 @ 10 kHz, 0.1 Vrms (μH)	Freq. Range (MHz)	Impedance (Ω) Min.	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

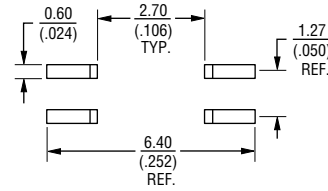
### Product Dimensions



### Typical Part Marking



### Recommended PCB Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### How to Order

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

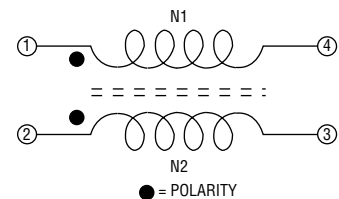
### General Specifications

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.  
 Moisture Sensivity Level.....1  
 ESD Classification (HBM).....N/A

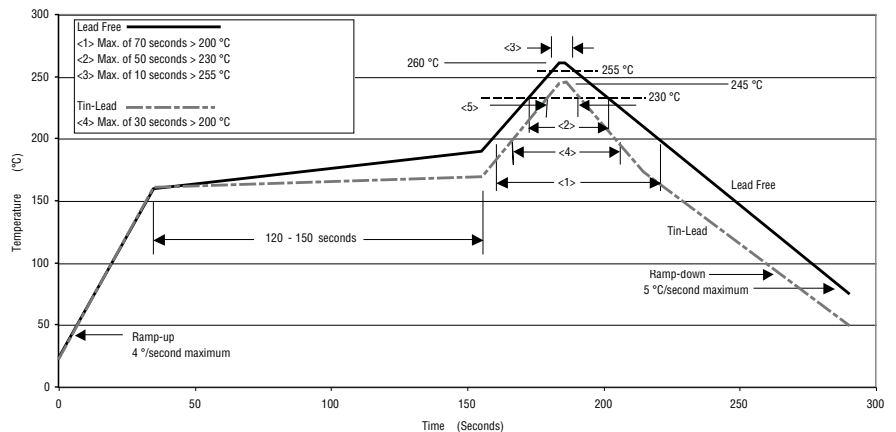
### Materials

Core.....Ferrite  
 Wire .... Enameled 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



### Solder Profile



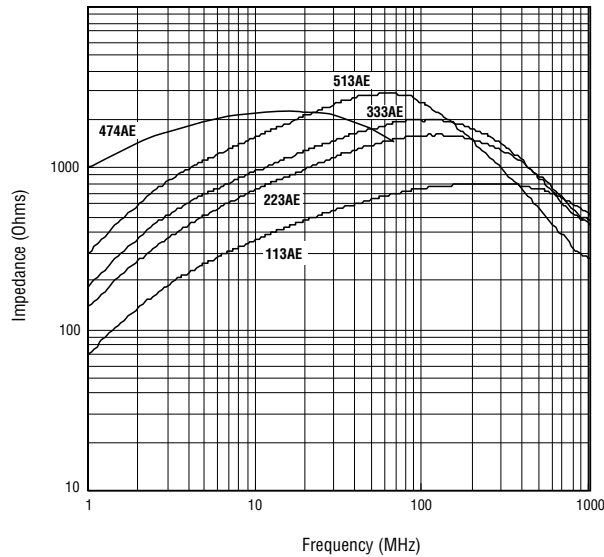
**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 Specifications are subject to change without notice.  
 Users should verify actual device performance in their specific applications.  
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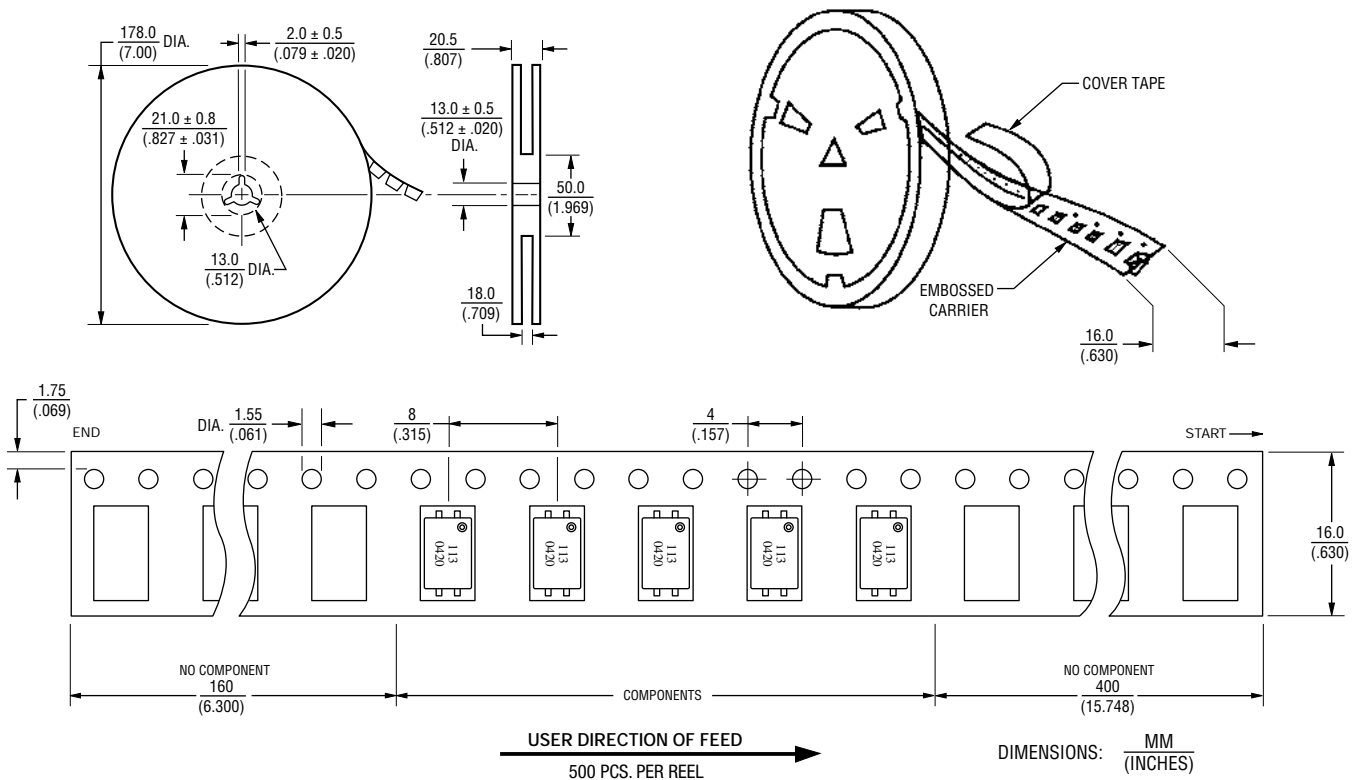
# DR221 Series Surface Mount Data Line Chokes

**BOURNS®**

## Impedance vs. Frequency



## Packaging Specifications



REV. 11/19

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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