

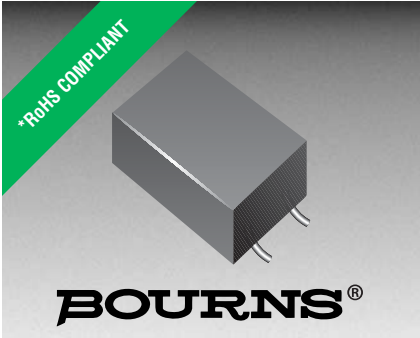
## Excellent Integrated System Limited

Stocking Distributor

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[Bourns Inc.](#)  
[DR221-223AE](#)

For any questions, you can email us directly:  
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



### 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

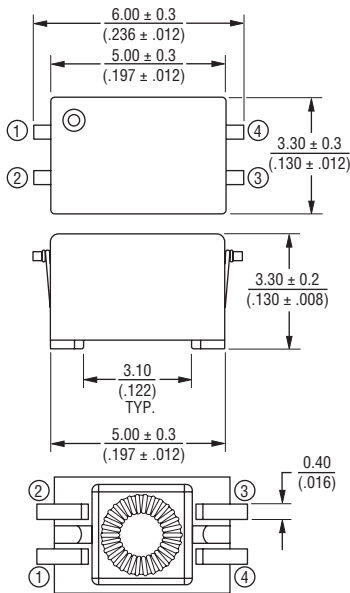
## DR221 Series Surface Mount Data Line Chokes

### Electrical Characteristics (@ 25 °C)

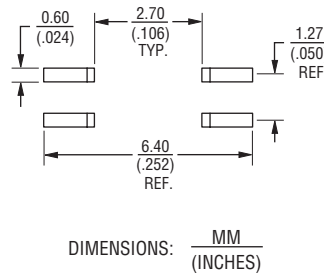
Bourns Part Number	L1, L2 @ 10kHz, 0.1 Vrms (μH)	Freq. Range (MHz)	Impedance Min. (Ω)	RDC (Ω) (Each Winding)		Rated Current (mA)
				Max.	Typ.	
DR221-113AE	11.0 +50 %/-30 %	100~500	450	0.18	0.13	250
DR221-223AE	22.0 +50 %/-30 %	40~300	900	0.23	0.17	250
DR221-333AE	33.0 +50 %/-30 %	30~250	1000	0.27	0.20	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

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 .....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

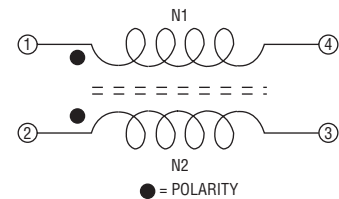
### Product Dimensions



### Recommended PCB Layout



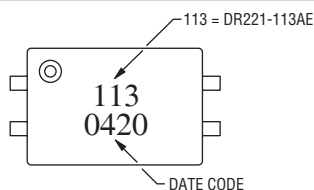
### Schematic



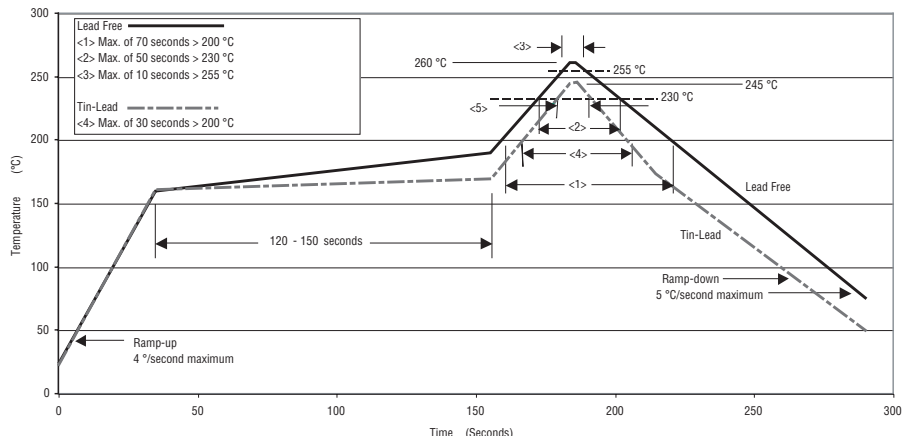
### How to Order

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

### Typical Part Marking



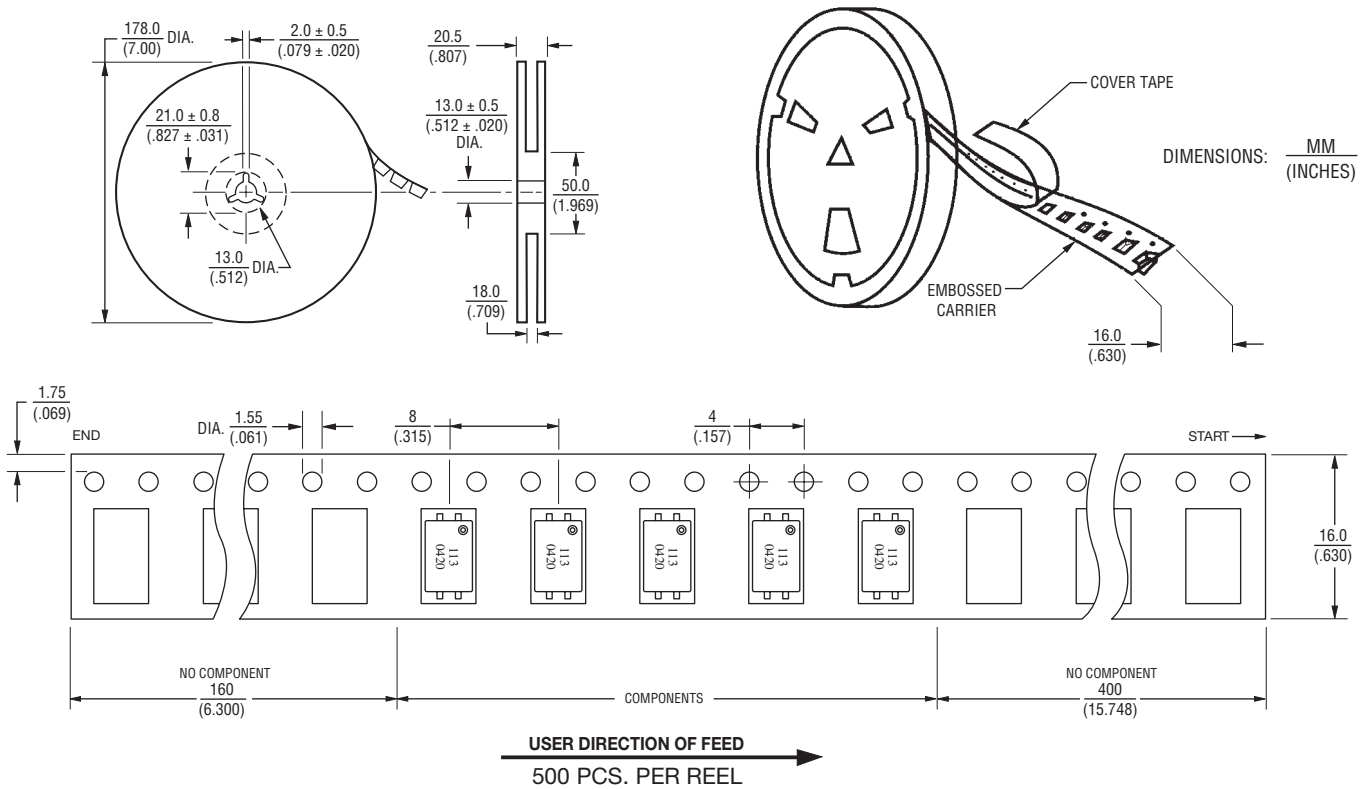
### Solder Profile



\*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

