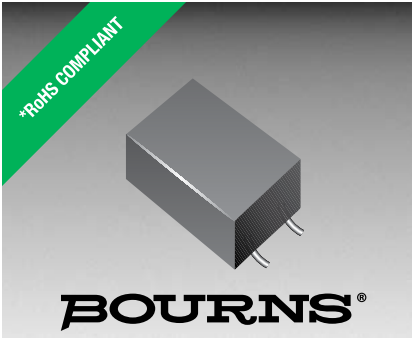




**THE DATASHEET OF
DR221-513AE**





Features

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

Applications

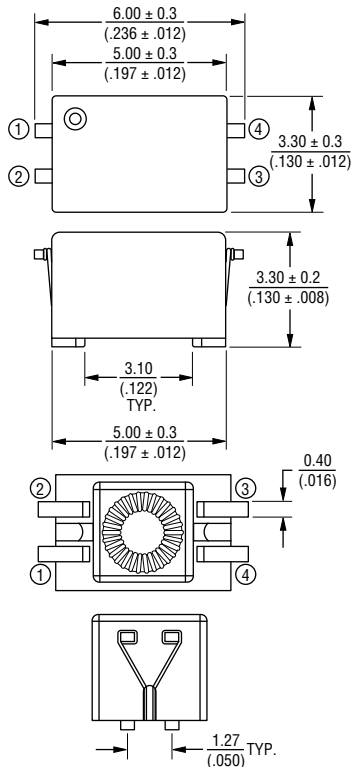
- For the suppression of EMI in data and signal lines

DR221 Series Surface Mount Data Line Chokes

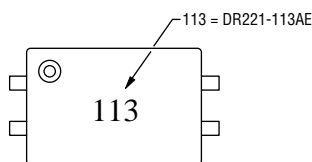
Electrical Specifications @ 25 °C

| 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 |

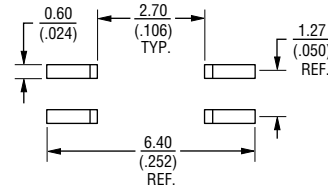
Product Dimensions



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)

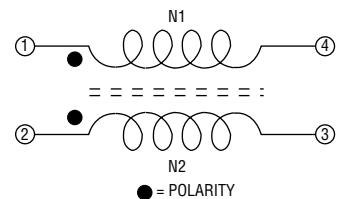
General Specifications

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 Sensitivity Level.....1
 ESD Classification (HBM).....N/A

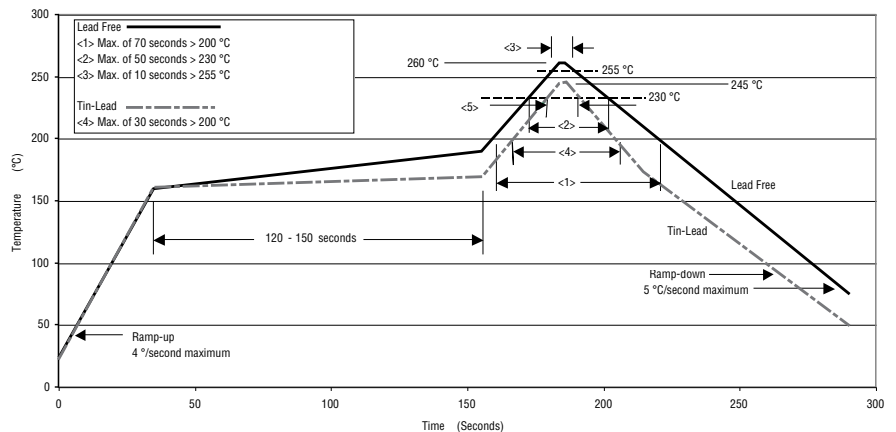
Materials

Core.....Ferrite
 Wire Enameled copper wire (Class F)
 BaseLCP (UL 94V-0)
 Terminal.....Cu/Ni/Sn
 Adhesive.....Epoxy resin
 Weight2 g
 Packaging.....500 pcs. per reel

Schematic



Solder Profile



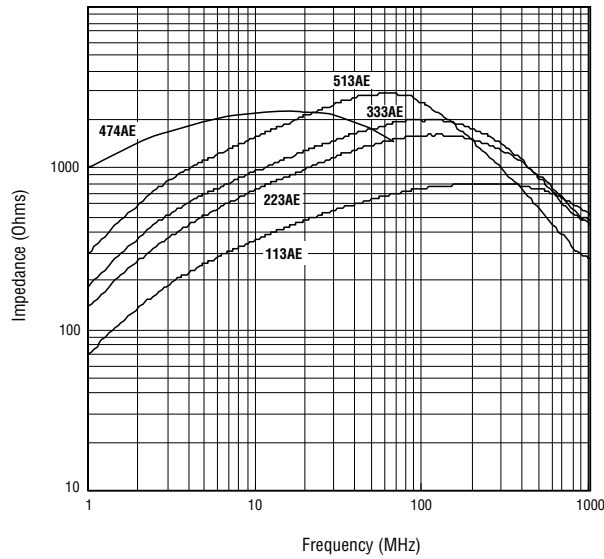
WARNING
 Cancer and Reproductive Harm
www.P65Warnings.ca.gov

* 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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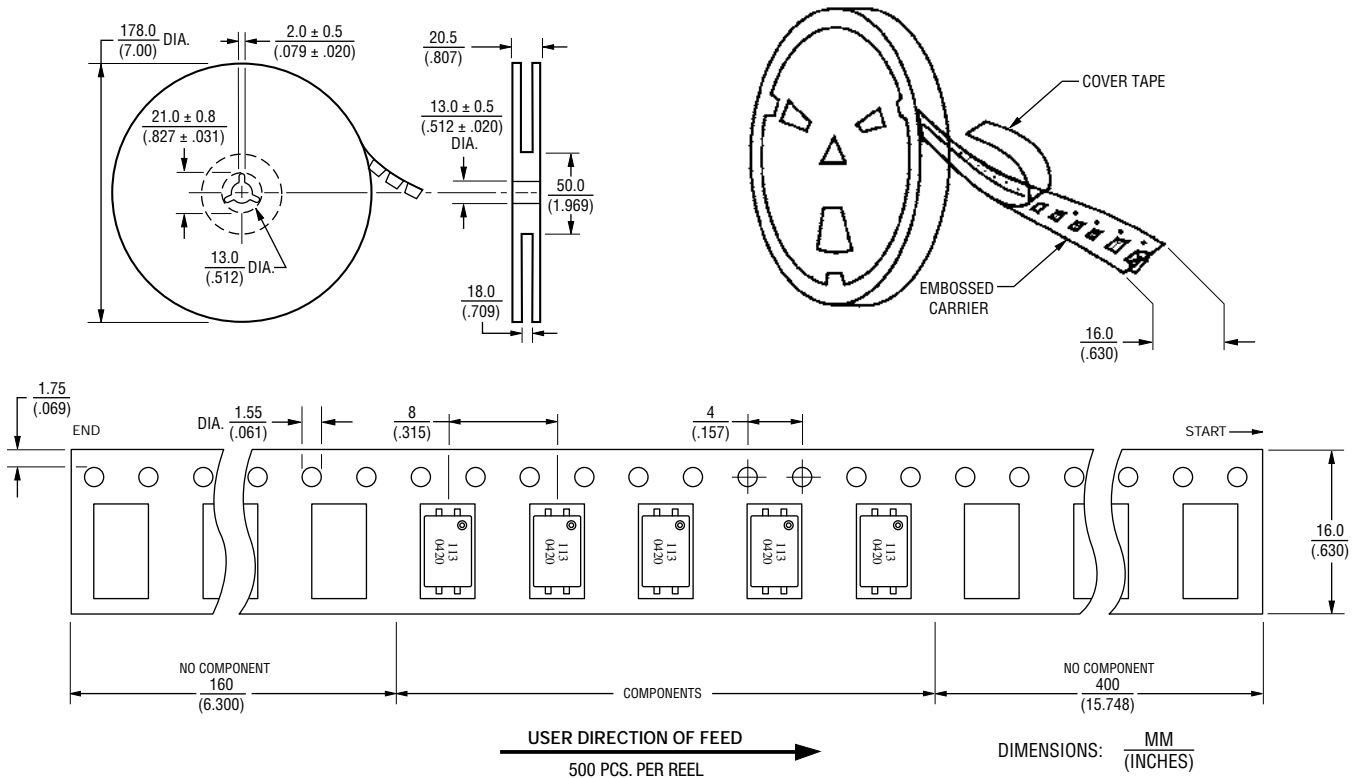
DR221 Series Surface Mount Data Line Chokes

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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-  [Bourns Inc. Information](#)

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