

Features

- Fully encapsulated
- Low profile
- Low insertion loss
- Frequency range 10 kHz to 500 MHz
- Impedance levels from 12.5 Ω to 800 Ω (nominal 50 Ω)
- 6 pin DIP and SMD
- Lead free
- RoHS compliant**

BOURNS®

RF2, RF3, RF4 Series - Wideband Transformers

Electrical Specifications @ 25 °C

| Type D | Part Number Type W | Type J | Ratio Impedance | Frequency MHz | Insertion Loss | | | Schematic |
|-----------|-----------------------|-----------|--------------------|------------------|----------------|------------|------------|--------------------------|
| | | | | | 3dB MHz | 2dB MHz | 1dB MHz | |
| 2-1-1D_ | 2-1-1W_ | 2-1-1J_ | 1 | .050-200 | .050-200 | .080-150 | .20-80 | <p>RF2 Series</p> |
| 2-1-6D_ | 2-1-6W_ | 2-1-6J_ | 1 | .003-300 | .003-300 | .010-150 | .02-50 | |
| 2-2-1D_ | 2-2-1W_ | 2-2-1J_ | 2 | .070-200 | .070-200 | .100-100 | .50-50 | |
| 2-2.5-6D_ | 2-2.5-6W_ | 2-2.5-6J_ | 2.5 | .010-100 | .010-100 | .020-50 | .05-20 | |
| 2-3-1D_ | 2-3-1W_ | 2-3-1J_ | 3 | .050-250 | .050-250 | .100-200 | .50-70 | |
| 2-4-1D_ | 2-4-1W_ | 2-4-1J_ | 4 | .200-350 | .200-350 | .350-300 | 2-100 | |
| 2-4-6D_ | 2-4-6W_ | 2-4-6J_ | 4 | .020-250 | .020-250 | .050-150 | .10-100 | |
| 2-5-1D_ | 2-5-1W_ | 2-5-1J_ | 5 | .300-300 | .300-300 | .600-200 | 5-100 | |
| 2-8-1D_ | 2-8-1W_ | 2-8-1J_ | 8 | .030-140 | .030-140 | .100-90 | 1-60 | |
| 2-13-1D_ | 2-13-1W_ | 2-13-1J_ | 13 | .300-120 | .300-120 | .700-80 | 5-20 | |
| 2-16-6D_ | 2-16-6W_ | 2-16-6J_ | 16 | .030-75 | .030-75 | .060-30 | 10-20 | |
| 3-1-1D_ | 3-1-1W_ | 3-1-1J_ | 1 | .150-400 | .150-400 | .350-200 | 2-50 | |
| 3-1-6D_ | 3-1-6W_ | 3-1-6J_ | 1 | .010-150 | .010-150 | .020-100 | .05-50 | |
| 3-1.5-1D_ | 3-1.5-1W_ | 3-1.5-1J_ | 1.5 | .100-300 | .100-300 | .200-150 | .50-80 | |
| 3-1.5-6D_ | 3-1.5-6W_ | 3-1.5-6J_ | 1.5 | .020-100 | .020-100 | .050-50 | .10-25 | |
| 3-2.5-6D_ | 3-2.5-6W_ | 3-2.5-6J_ | 2.5 | .010-100 | .010-100 | .020-50 | .05-20 | |
| 3-4-6D_ | 3-4-6W_ | 3-4-6J_ | 4 | .020-200 | .020-200 | .050-150 | .10-100 | |
| 3-9-1D_ | 3-9-1W_ | 3-9-1J_ | 9 | .150-200 | .150-200 | .300-150 | 2-40 | |
| 3-16-1D_ | 3-16-1W_ | 3-16-1J_ | 16 | .300-120 | .300-120 | .700-80 | .50-20 | |
| 3-36-1D_ | 3-36-1W_ | 3-36-1J_ | 36 | .030-20 | .030-20 | .050-10 | .10-5 | |
| 4-1-6D_ | 4-1-6W_ | 4-1-6J_ | 1 | .004-500 | .004-500 | .020-200 | .10-50 | <p>RF4 Series</p> |
| 4-1.5-1D_ | 4-1.5-1W_ | 4-1.5-1J_ | 1.5 | .075-500 | .075-500 | .200-100 | .10-50 | |
| 4-2.5-6D_ | 4-2.5-6W_ | 4-2.5-6J_ | 2.5 | .010-50 | .010-50 | .025-25 | .05-10 | |
| 4-4-1D_ | 4-4-1W_ | 4-4-1J_ | 4 | .050-200 | .050-200 | .200-50 | 1-30 | |
| 4-25-1D_ | 4-25-1W_ | 4-25-1J_ | 25 | .020-30 | .020-30 | .050-20 | .10-10 | |

Note:

RF2 and RF3 are standard units. RF4 only on request.

Terminal Material: 97Sn/2.5Cu/0.5Ag

Operating Temperature Range: 0 °C to +70 °C

Storage Temperature Range: -40 °C to +85 °C

REV. 01/09

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
Specifications are subject to change without notice.

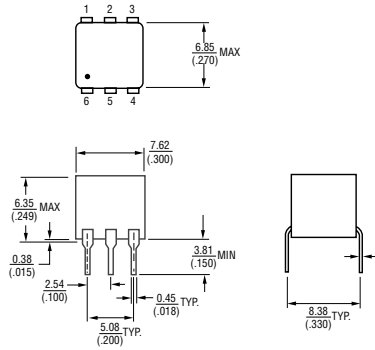
Customers should verify actual device performance in their specific applications.

RF2, RF3, RF4 Series - Wideband Transformers

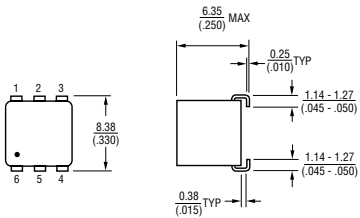


Product Dimensions

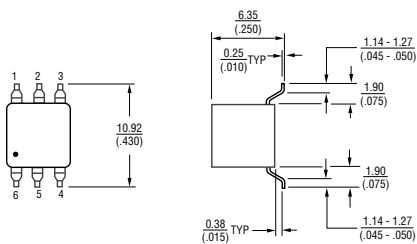
Type D



Type J



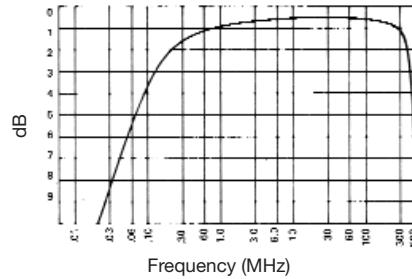
Type W



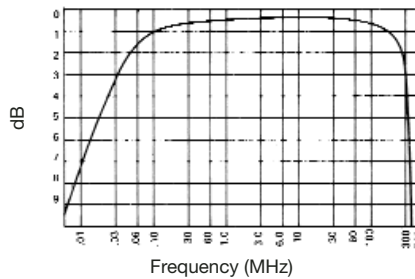
DIMENSIONS ARE: $\frac{\text{MM}}{\text{(INCHES)}}$

Typical Frequency Response

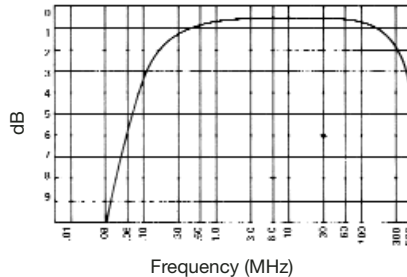
2-4-1 3 dB Bandwidth 0.200-350 MHz



2-3-1 3 dB Bandwidth 0.050-250 MHz



3-1-1 3 dB Bandwidth 0.150-400 MHz



How to Order

x - x - x x - - L

Model _____
 Impedance Ratio _____ (see "Ratio Impedance")
 Type Number _____
 Termination Type _____ (see "Product Dimensions")
 D = Through-hole
 W = Surface Mount (Gull-Wing)
 J = Surface Mount ("J" Leads)
 Impedance Ratio _____
 P = Ratio: Primary to Secondary (R : 1)
 Blank = Ratio: Secondary to Primary (R : 1)
 Where "R" is the Ratio Impedance in Electrical Specifications chart
 Packaging _____
 E = Tape and Reel (Types J and W only)
 Blank = Tubes (Types D and W only)
 Termination Material _____
 L = 97Sn/2.5Cu/0.5Ag (lead free)

Packaging

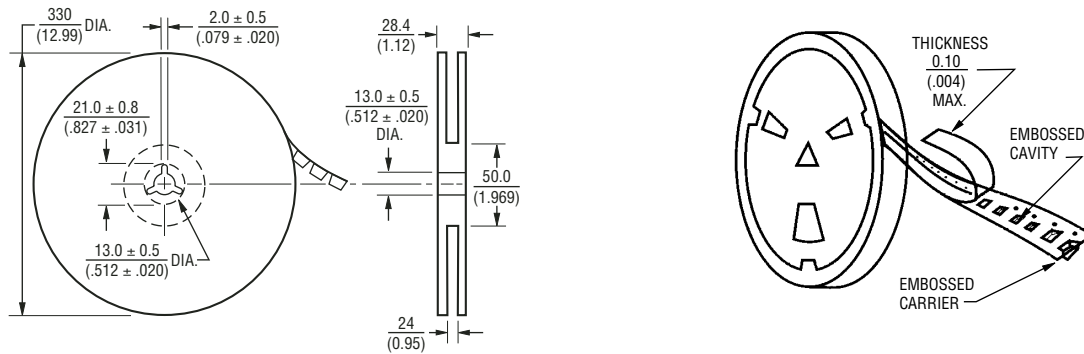
Tape and Reel (Types J and W only)
700 pcs./reel
 Tubes (Types D and W only)....68 pcs./tube

Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

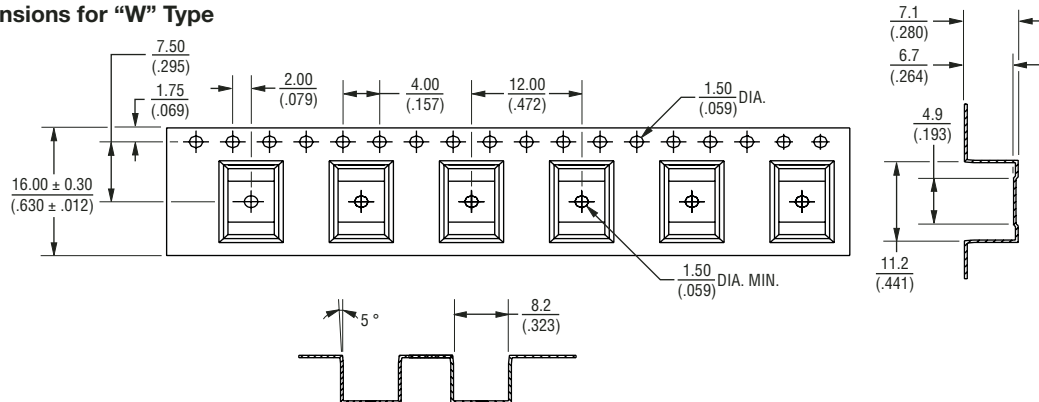
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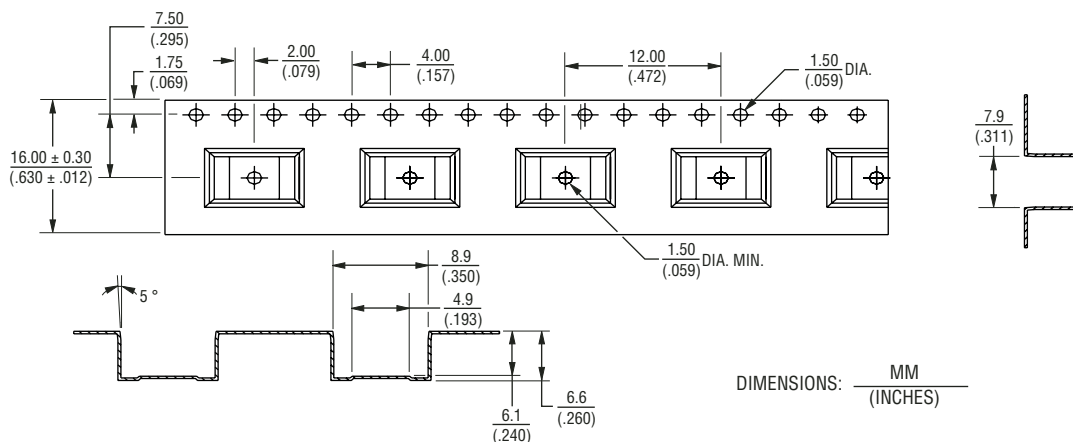
Packaging Dimensions



Tape Dimensions for "W" Type



Tape Dimensions for "J" Type



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

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