R & S SERIES
RF WIDEBAND TRANSFORMER

ELECTRICAL SPECIFICATIONS

- Operating Temperature: −55°C to +125°C
- Storage Temperature: −60°C to +130°C
- Temperature Rise @ 90°C: < 45°C
- Inductance at rated DC: < 30%
- Dielectric Withstanding Voltage: 100 V_{AC}
- Different electrical values available upon request
- Power Rating: 100 mW
- Outgassing TML: <1%
- Frequency Response: 2 MHz to 300 MHz

FEATURES

- Compact, low profile, ideal for automatic placement
- Built to meet MIL-T-55631 specifications
- Low thermal expansion, Transfer Molded Package
- Terminations: Tin-lead coated
- Welded Internal Connections
- Moisture, Shock, and Immersion Resistant
- Resistance to Soldering Heat: 275°C for 10 secs
- Other termination finishes available

APPLICATIONS

- Filter inductors
- Ripple suppressors
- Common mode chokes
- Isolation transformers
- Step up transformers
- Step down transformers
- Power supplies
- DC/DC converters
- SEPIC converters

CUSTOM DESIGNS & MODIFICATIONS:
Other electrical configurations and performance characteristics are available in various sizes and package types

MARKINGS: LASER OR INK

THRU-HOLE PACKAGES ALSO AVAILABLE

REV C

www.ve1.com | support@ve1.com | sales@ve1.com | P: 714-842-3330
17941 Brookshire Lane | Huntington Beach | CA 92647
### Vanguard Electronics - Wideband Transformer

**R & S Series**

**CUSTOM DESIGNS & MODIFICATIONS:**
Other electrical configurations and performance characteristics are available in various sizes and package types.

<table>
<thead>
<tr>
<th>Vanguard P/N</th>
<th>Vanguard P/N</th>
<th>Impedance Ratio Pri:Sec</th>
<th>Primary Center Tap**</th>
<th>Secondary Center Tap</th>
<th>max Insertion Loss (dB) at 50 (MHz)</th>
<th>max VSWR at 50 (MHz)</th>
<th>min Bandwidth (MHz)</th>
<th>0.5 dB (Ripple)</th>
<th>3 dB Points</th>
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<tbody>
<tr>
<td>RUB55D</td>
<td>SUB55D</td>
<td>1:1</td>
<td>No</td>
<td>Yes</td>
<td>0.8</td>
<td>1.35</td>
<td>6.0 - 120</td>
<td>1.5 - 360</td>
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<td>Yes</td>
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<td>1.80</td>
<td>7.0 - 80</td>
<td>4.0 - 180</td>
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<td>1.40</td>
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<td>1.30</td>
<td>7.0 - 130</td>
<td>0.9 - 270</td>
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<tr>
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<td>1:16</td>
<td>No</td>
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<td>1.3*</td>
<td>2.0*</td>
<td>14 - 30</td>
<td>3.0 - 125</td>
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<td>No</td>
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<td>1.40</td>
<td>8.0 - 90</td>
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<tr>
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<td>No</td>
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<td>1.80</td>
<td>9.0 - 60</td>
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<tr>
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<td>8.0 - 125</td>
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<tr>
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<td>2.10*</td>
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</table>

Inductance measured at 10 kHz, 0.1 V\textsubscript{RMS}  
*Measured at 15 MHz  
**To design with primary center tap - contact factory.