



## R & S SERIES

### RF WIDEBAND TRANSFORMER



### MIL-PRF-27

### 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<sub>AC</sub>
- **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

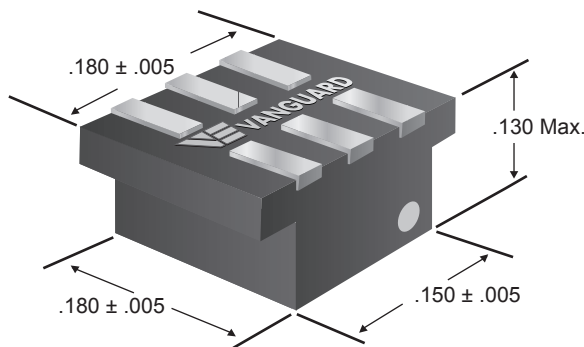
#### CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types

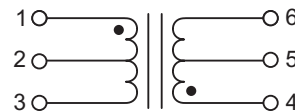
Bandwidth (MHz)	Max Insertion Loss @ 50MHz	Impedance Ratio
0.5 to 390	0.8 to 1.8	1:1 to 1:16

MARKINGS: LASER OR INK

## R SERIES



SCHEMATIC

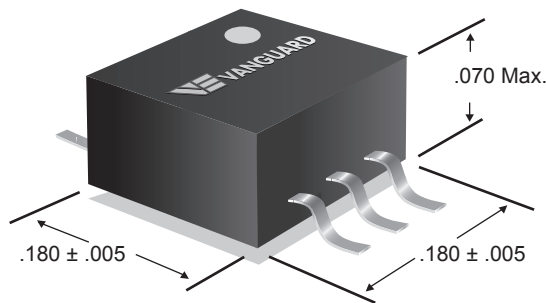


ACTUAL SIZE

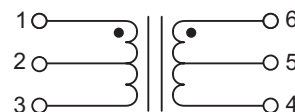


THRU-HOLE PACKAGES ALSO AVAILABLE

## S SERIES



SCHEMATIC



ACTUAL SIZE





## DATA TABLE

Vanguard P/N R SERIES	Vanguard P/N S SERIES	Impedance Ratio Pri : Sec	Primary Center Tap**	Secondary Center Tap	max Insertion Loss (dB) at 50 (MHz)	max VSWR at 50 (MHz)	min Bandwidth (MHz)	
							0.5 dB (Ripple)	3 dB Points
RUB55D	SUB55D	1 : 1	No	Yes	0.8	1.35	6.0 - 120	1.5 - 360
RUB57D	SUB57D	1 : 1.5	No	Yes	1.6	1.80	7.0 - 80	4.0 - 180
RUB510D	SUB510D	1 : 2	No	Yes	1.2	1.40	12 - 85	1.2 - 200
RUB520D	SUB520D	1 : 4	No	Yes	1.0	1.30	7.0 - 130	0.9 - 270
RUB580D	SUB580D	1 : 16	No	Yes	1.3*	2.0*	14 - 30	3.0 - 125
RUU55D	SUU55D	1 : 1	No	No	1.0	1.40	8.0 - 90	1.5 - 300
RUU57D	SUU57D	1 : 1.5	No	No	1.8	1.80	9.0 - 60	6.0 - 130
RUU510D	SUU510D	1 : 2	No	No	1.4	1.50	15 - 80	1.5 - 250
RUU520	SUU520	1 : 4	No	No	1.2	1.35	8.0 - 125	1.3 - 210
RUU580D	SUU580D	1 : 16	No	No	1.6*	2.10*	16 - 25	3.0 - 100

Inductance measured at 10 kHz, 0.1 V<sub>RMS</sub>

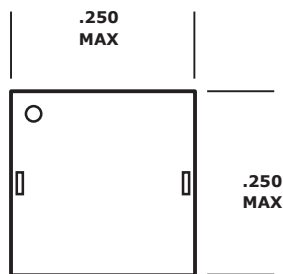
\*Measured at 15 MHz

\*\*To design with primary center tap - contact factory.

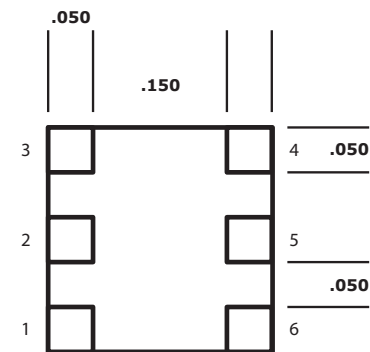
## R SERIES



SIDE VIEW

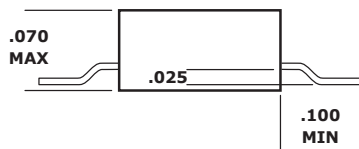


BOTTOM VIEW

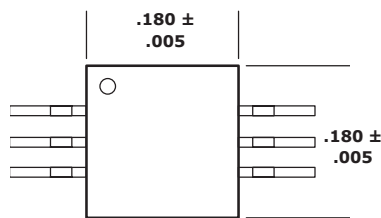


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

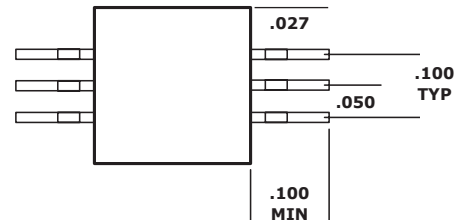
## S SERIES



SIDE VIEW



BOTTOM VIEW



RECOMMENDED MOUNTING PAD CIRCUIT SIDE

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