



SR & SS SERIES

RF WIDEBAND TRANSFORMER



MIL-STD-981

Bandwidth (MHz)	Max Insertion Loss @ 50MHz	Impedance Ratio
0.5 to 3000*	0.8 to 2.0	1:1 to 1:16

*Reference SUWB Series

MARKINGS: LASER OR INK

THRU-HOLE PACKAGES
ALSO AVAILABLE

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Dielectric Withstanding Voltage:** 100 V_{AC}
- **Different electrical values available upon request**
- **Power Rating:** 100 mW
- **Outgassing per ASTM E595** (TML <1%, CVCM <0.1%)

FEATURES

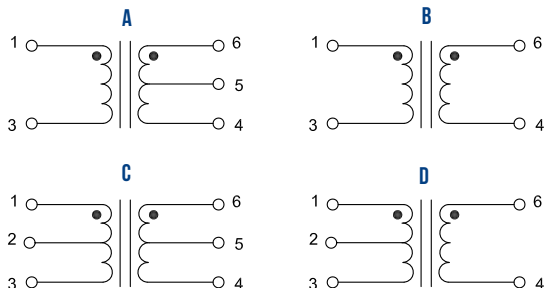
- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981** specifications
- **Low thermal expansion, Transfer Molded Package**
- **Terminations:** Tin-lead, RoHS
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Resistance to Soldering Heat:** 265°C for 10 secs
- **Other termination finishes available**

MIL-STD-981 Testing:

Add -"S" suffix for Class S Testing

Add -"B" suffix for Class B Testing

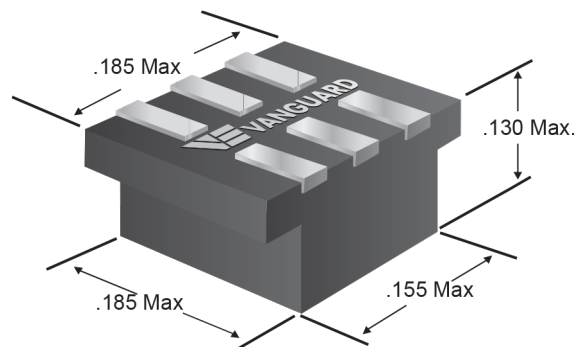
SCHEMATIC



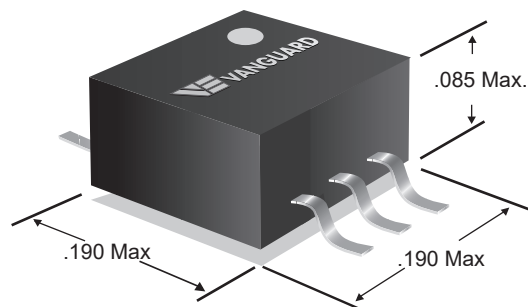
CUSTOM DESIGNS & MODIFICATIONS:

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

SR SERIES



SS SERIES



SR & SS SERIES





DATA TABLE

Vanguard P/N SR SERIES	Vanguard P/N SS SERIES	Impedance Ratio Pri : Sec	Primary Center Tap	Secondary Center Tap	Insertion Loss @ 50 MHz max (dB)	VSWR @ 50 MHz max	Bandwidth min (MHz)		Schematic
SRUB55D	SSUB55D	1 : 1	No	Yes	1.0	1.35	6.0 - 120	1.5 - 360	A
SRUB1010D	-	1 : 1	No	Yes	1.3	1.7	12 - 35	3 - 125	A
-	SSUB1010D	1 : 1	No	Yes	0.8	1.35	6 - 120	1.5 - 360	A
SRUB57D	SSUB57D	1 : 1.5	No	Yes	1.6	1.80	7.0 - 80	4.0 - 180	A
SRUB510D	SSUB510D	1 : 2	No	Yes	1.0	1.27	12 - 85	1.2 - 200	A
SRUB1020D	SSUB1020D	1 : 2	No	Yes	1.2	1.4	12 - 85	1.2 - 200	A
SRUB520D	SSUB520D	1 : 4	No	Yes	1.0	1.30	7.0 - 130	0.9 - 270	A
SRUB545D	SSUB545D	1 : 9	No	Yes	2.0**	-	-	6 - 100	A
SRUB580D	SSUB580D	1:16	No	Yes	1.3*	2.0*	14 - 30	3.0 - 125	A
SRUU55D	SSUU55D	1 : 1	No	No	1.0	1.35	8.0 - 90	1.5 - 300	B
SRUU57D	SSUU57D	1 : 1.5	No	No	1.5	1.80	9.0 - 60	6.0 - 130	B
SRUU510D	SSUU510D	1 : 2	No	No	1.4	1.50	15 - 80	1.5 - 250	B
SRUU520	SSUU520	1 : 4	No	No	1.2	1.35	8.0 - 125	1.3 - 210	B
SRUU580D	SSUU580D	1 : 16	No	No	1.3*	2.0*	16 - 25	3.0 - 100	B
SRBB55D	SSBB55D	1 : 1	Yes	Yes	1.0	1.35	6.0 - 120	1.5 - 360	C
SRBB57D	SSBB57D	1 : 1.5	Yes	Yes	1.6	1.80	7.0 - 80	4.0 - 180	C
SRBB1020D	SSBB1020D	1 : 2	Yes	Yes	1.2	1.4	12 - 85	1.2 - 200	C
SRBB520D	SSBB520D	1 : 4	Yes	Yes	1.0	1.30	7.0 - 130	0.9 - 270	C
SRBB545D	SSBB545D	1 : 9	Yes	Yes	2.0**	-	-	6 - 100	C
SRBB580D	SSBB580D	1:16	Yes	Yes	1.3*	2.0*	14 - 30	3.0 - 125	C
SRBU55D	SSUU55D	1 : 1	Yes	No	1.0	1.35	8.0 - 90	1.5 - 300	D
SRBU57D	SSUU57D	1 : 1.5	Yes	No	1.5	1.80	9.0 - 60	6.0 - 130	D
SRBU1020D	SSBU1020D	1 : 2	Yes	No	1.2	1.4	12 - 85	1.2 - 200	D
SRBU510D	SSUU510D	1 : 2	Yes	No	1.4	1.50	15 - 80	1.5 - 250	D
SRBU520	SSUU520	1 : 4	Yes	No	1.2	1.35	8.0 - 125	1.3 - 210	D
SRUB545D	SSUB545D	1 : 9	Yes	No	2.0**	-	-	6 - 100	D
SRBU580D	SSUU580D	1 : 16	Yes	No	1.3*	2.0*	16 - 25	3.0 - 100	D

Inductance measured at 10 kHz, 0.1 V_{RMS}

*Measured at 15MHz **Measured at 10.7 MHz

FOR ADDITIONAL CATALOG VALUES, PLEASE SEE THE BELOW PART NUMBERING SYSTEM OR CONTACT THE FACTORY:

CUSTOM DESIGNS & MODIFICATIONS:

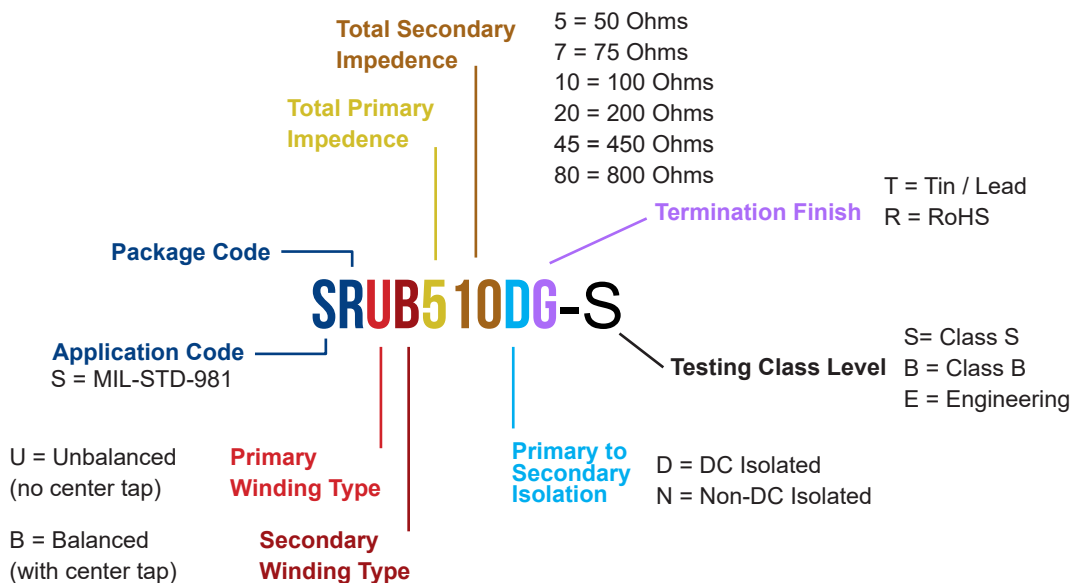
Other electrical configurations and performance characteristics are available in various sizes and package types

SR & SS SERIES





PART NUMBER



CUSTOM DESIGNS & MODIFICATIONS:

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

SR & SS SERIES



