



SK & SM SERIES

RF WIDEBAND TRANSFORMER



MIL-STD-981

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Temperature Rise @ 90°C:** < 45°C
- **Dielectric Withstanding Voltage:** 100 V_{AC}
- **Different electrical values available upon request**
- **Power Rating:** 250 mW
- **Outgassing compliant per ASTM E595**
(TML <1%, CVCM <0.1%)
- **Frequency Response:** Up to 500 MHz

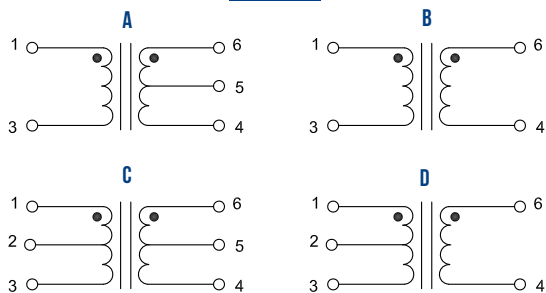
FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981** specifications
- **Low thermal expansion, Transfer Molded Package**
- **Terminations:** Tin-lead, Gold, 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

APPLICATIONS

- Wideband Transformers
- RF Transformers

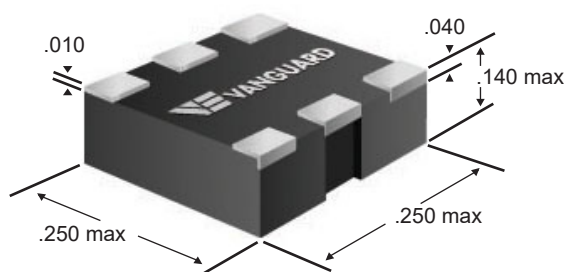
SCHEMATIC



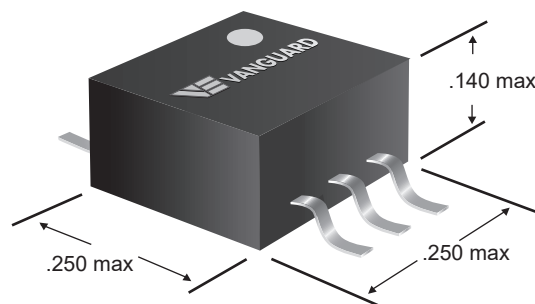
CUSTOM DESIGNS & MODIFICATIONS:

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

SK SERIES



SM SERIES



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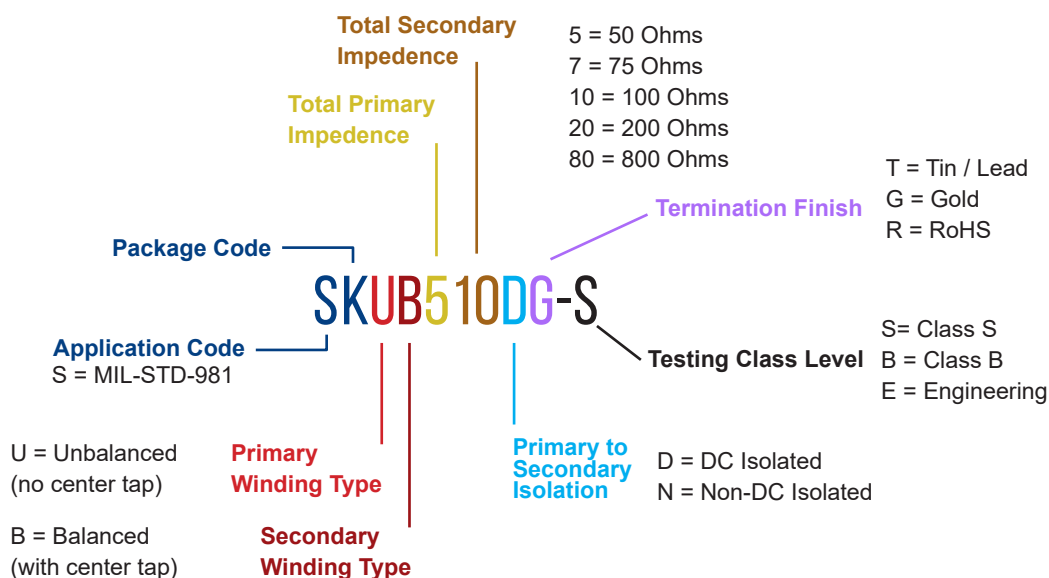
DATA TABLE

Vanguard P/N SK Series	Vanguard P/N SM 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
SKUB55D	SMUB55D	1 : 1	No	Yes	0.7	1.3	5.0 - 130	1.0 - 390	A
SKUB57D	SMUB57D	1 : 1.5	No	Yes	1.5	1.6	6.0 - 90	3.0 - 200	A
SKUB510D	SMUB510D	1 : 2	No	Yes	1.1	1.35	2.0 - 100	0.5 - 230	A
SKUB520D	SMUB520D	1 : 4	No	Yes	0.9	1.2	2.0 - 150	0.2 - 300	A
SKUB580D	SMUB580D	1 : 16	No	Yes	1.2*	1.7*	12 - 35	2.0 - 140	A
SKUU55D	SMUU55D	1 : 1	No	No	0.9	1.35	7.0 - 100	1.2 - 350	B
SKUU57D	SMUU57D	1 : 1.5	No	No	1.7	1.65	8.0 - 70	4.0 - 170	B
SKUU510D	SMUU510D	1 : 2	No	No	1.3	1.4	3.0 - 85	0.9 - 200	B
SKUU520	SMUU520	1 : 4	No	No	1.1	1.25	4.0 - 130	1.0 - 250	B
SKUU580D	SMUU580D	1 : 16	No	No	1.1	1.95	12 - 25	2.5 - 110	B
SKBB55D	SMBB55D	1 : 1	Yes	Yes	0.7	1.3	5.0 - 130	1.0 - 390	C
SKBB57D	SMBB57D	1 : 1.5	Yes	Yes	1.5	1.6	6.0 - 90	3.0 - 200	C
SKBB510D	SMBB510D	1 : 2	Yes	Yes	1.1	1.35	2.0 - 100	0.5 - 230	C
SKBB520D	SMBB520D	1 : 4	Yes	Yes	0.9	1.2	2.0 - 150	0.2 - 300	C
SKBB580D	SMBB580D	1 : 16	Yes	Yes	1.2*	1.7*	12 - 35	2.0 - 140	C
SKBU55D	SMBU55D	1 : 1	Yes	No	0.9	1.35	7.0 - 100	1.2 - 350	D
SKBU57D	SMBU57D	1 : 1.5	Yes	No	1.7	1.65	8.0 - 70	4.0 - 170	D
SKBU510D	SMBU510D	1 : 2	Yes	No	1.3	1.4	3.0 - 85	0.9 - 200	D
SKBU520	SMBU520	1 : 4	Yes	No	1.1	1.25	4.0 - 130	1.0 - 250	D
SKBU580D	SMBU580D	1 : 16	Yes	No	1.1	1.95	12 - 25	2.5 - 110	D

Inductance measured at 10 kHz, 0.1 V_{RMS} *Measured at 15 MHz

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

PART NUMBER



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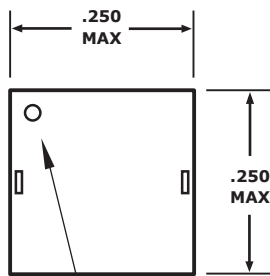




SK SERIES

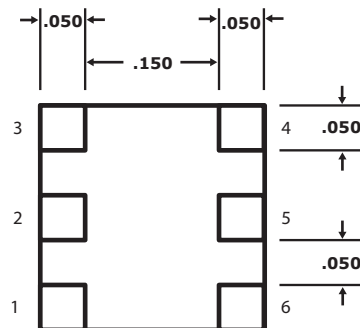


SIDE VIEW



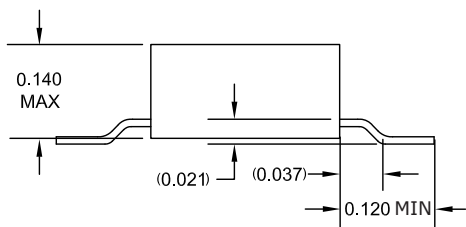
TOP VIEW

Dot identifies
terminal #1



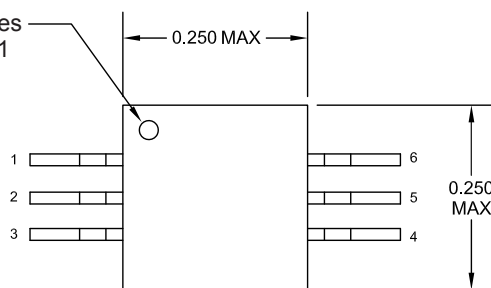
BOTTOM VIEW

SM SERIES

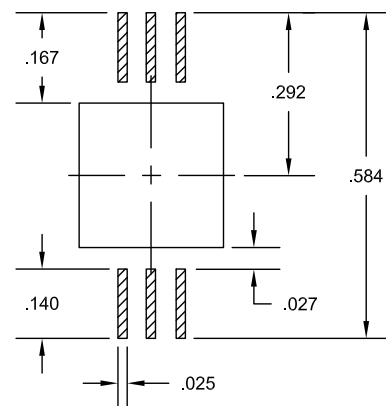


SIDE VIEW

Dot identifies
terminal #1

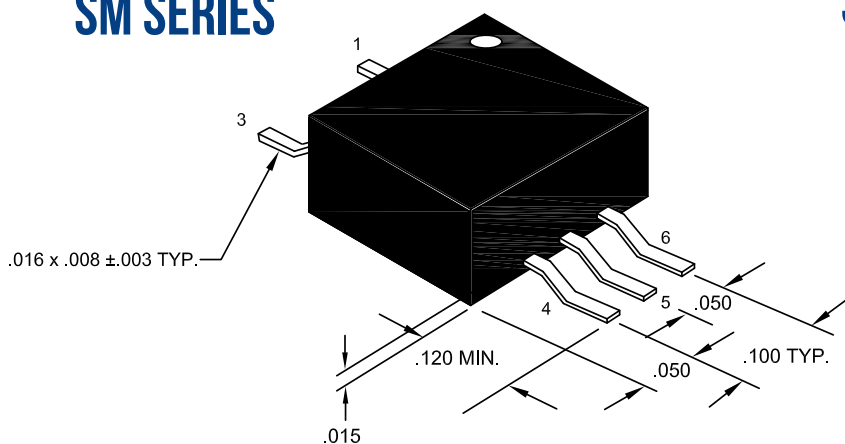


TOP VIEW

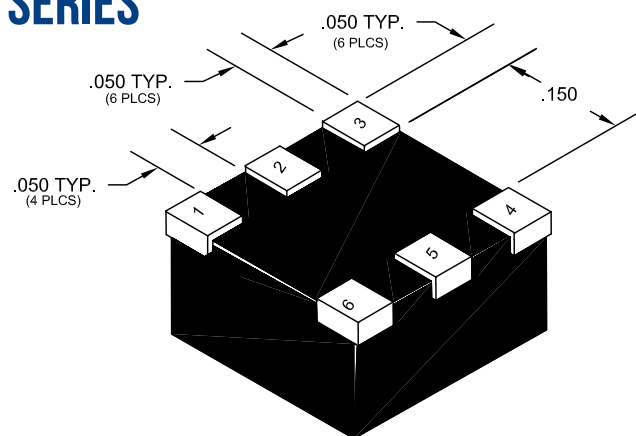


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

SM SERIES



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