



SCMN4 SERIES NANOCRYSTALLINE COMMON MODE CHOKE



ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Temperature Rise:** < 30°C
- **Inductance:** Measured at 10kHz, 0.10V
- **DCR:** Measured at room ambient (25°C)
- **Dielectric Withstanding Voltage:** 1000 V_{RMS}
- **Overload Current:** 1.5 times rated current
- **Different electrical values available upon request**

FEATURES

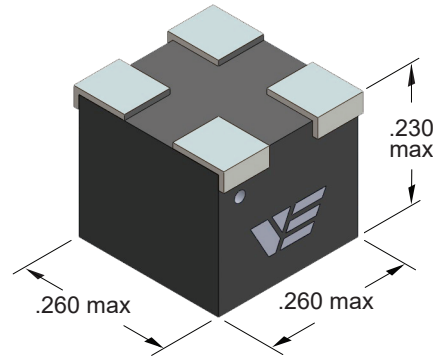
- **Compact**, low profile, ideal for automatic placement
- **Terminations:** HMP solder, Lead Free (RoHS)
- **Resistance to Soldering Heat:** 265°C for 10 seconds
- **Welded Internal Connections** - no reflow risk
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- Built to meet **MIL-STD-981** specifications
- **NASA outgassing compliant per ASTM E595** (TML <1%, CVCM <0.1%)
- **Other termination finishes available**
- **Ideally designed for GaN applications and higher switching frequencies**
- **Designed with nanocrystalline core for superior thermal stability and higher frequency operations**

ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

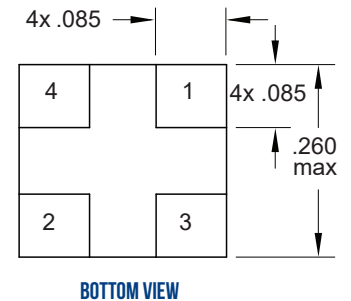
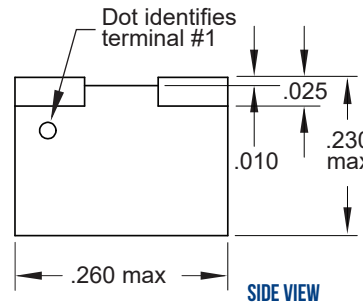
Inductance Range (mH)	DCR max (Ohms)	Current Rating (A)
0.07 - 10.4	0.011 - 0.25	2.70 - 0.48

ALL DIMENSIONS: INCHES

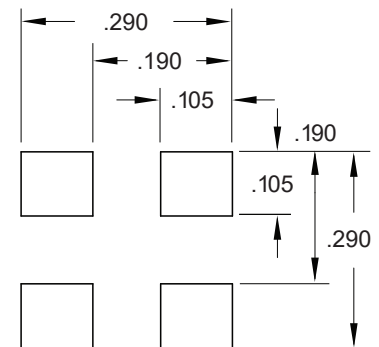


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK



IN	MM
0.290	7.37
0.260	6.60
0.230	5.85
0.190	4.83
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25



RECOMMENDED MOUNTING PAD CIRCUIT SIDE



SCHEMATIC

CUSTOM DESIGNS & MODIFICATIONS:

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





DATA TABLE

Vanguard P/N	Inductance @ 10kHz ± 40% (mH)	DCR Max (Ohms)	Rated Current (A)
SCMN4-702*-**	0.07	0.011	2.70
SCMN4-153*-**	0.15	0.016	2.21
SCMN4-273*-**	0.27	0.021	1.91
SCMN4-423*-**	0.42	0.027	1.71
SCMN4-603*-**	0.60	0.032	1.56
SCMN4-823*-**	0.82	0.037	1.45
SCMN4-114*-**	1.1	0.042	1.35
SCMN4-134*-**	1.3	0.048	1.27
SCMN4-174*-**	1.7	0.053	1.21
SCMN4-204*-**	2.0	0.055	1.15
SCMN4-244*-**	2.4	0.072	0.98
SCMN4-284*-**	2.8	0.074	0.94
SCMN4-334*-**	3.3	0.075	0.91
SCMN4-374*-**	3.7	0.093	0.79
SCMN4-434*-**	4.3	0.099	0.76
SCMN4-484*-**	4.8	0.11	0.74
SCMN4-544*-**	5.4	0.14	0.64
SCMN4-604*-**	6.0	0.15	0.62
SCMN4-674*-**	6.7	0.16	0.61
SCMN4-734*-**	7.3	0.17	0.59
SCMN4-814*-**	8.1	0.22	0.51
SCMN4-884*-**	8.8	0.23	0.50
SCMN4-964*-**	9.6	0.24	0.49
SCMN4-105*-**	10.4	0.25	0.48

VE PART NUMBER STRUCTURE KEY

EXAMPLE: SCMN4-204**S**-3-T

INDUCTANCE (uH) (mH)

702 = 70 uH
244 = 2.4 mH
884 = 8.8 mH

TERMINATION

S	SnPb
R	Pure Tin

RELIABILITY

2	Group A MIL-STD-981
3	Group A+B MIL-STD-981
7	Other

PACKAGING (Default Bulk)

B	Bulk
T	Tape and Reel

Tape and reel specs
Pcs. / reel maximum: (7") 200, (13") 800
Pitch between parts: 12 mm
Tape width: 16 mm

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