



SCMN 12 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

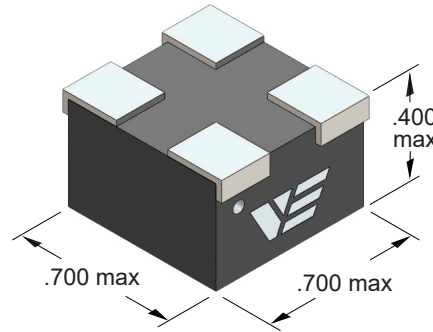
- **Compact**, low profile, ideal for automatic placement
- **Terminations:** Tin-Lead
- **Resistance to Soldering Heat:** 265°C for 10 seconds
- **Welded Internal Connections** - no reflow risk
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- Built to meet **MIL-STD-981** 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

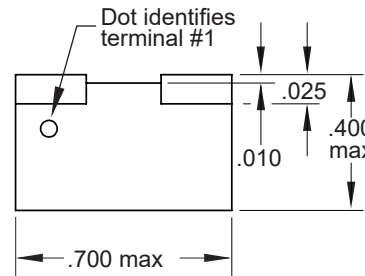
Inductance Range (mH)	DCR max (Ohms)	Current Rating (A)
0.08 - 10.0	0.009 - 0.149	9.3 - 1.70

ALL DIMENSIONS: INCHES

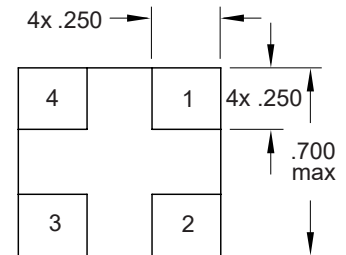


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

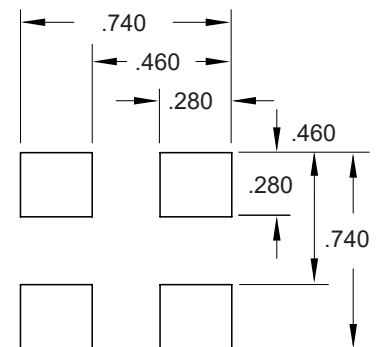


SIDE VIEW

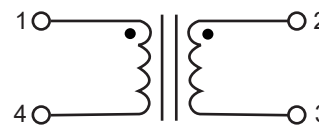


BOTTOM VIEW

IN	MM
0.740	18.80
0.700	17.78
0.460	11.68
0.400	10.16
0.280	7.11
0.250	6.35
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)
SCMN12-802*-*-*	0.08	0.009	9.3
SCMN12-323*-*-*	0.32	0.012	7.2
SCMN12-723*-*-*	0.72	0.017	6.4
SCMN12-134*-*-*	1.3	0.021	5.5
SCMN12-204*-*-*	2	0.023	4.9
SCMN12-294*-*-*	2.9	0.032	4.0
SCMN12-394*-*-*	3.9	0.042	3.3
SCMN12-514*-*-*	5.1	0.055	2.8
SCMN12-654*-*-*	6.5	0.076	2.3
SCMN12-804*-*-*	8	0.106	2.0
SCMN12-105*-*-*	10.0	0.149	1.7

VE PART NUMBER STRUCTURE KEY

EXAMPLE: SCMN12-802S-3-T

INDUCTANCE (uH) (mH)

802 = 80 uH
204 = 2 mH
105 = 10 mH

TERMINATION

S	SnPb
---	------

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, (13") 250
Pitch between parts: 24 mm
Tape width: 32 mm

CUSTOM DESIGNS & MODIFICATIONS:

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

SCMN 12 SERIES

