



## SCMN7 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<sub>RMS</sub>
- **Overload Current:** 1.5 times rated current
- **Different electrical values available upon request**

### FEATURES

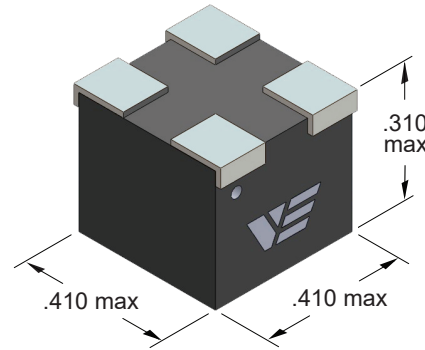
- **Compact**, low profile, ideal for automatic placement
- **Terminations:** Tin-Lead
- **Resistance to Soldering Heat:** 265°C for 10 seconds
- **Welded Internal Connections** - no reflow risk
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- Built to meet **MIL-STD-981**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

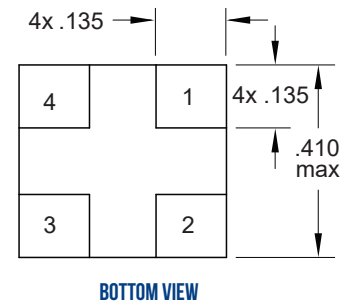
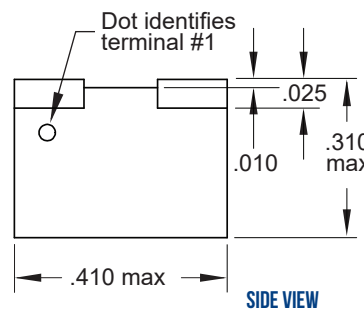
Inductance Range (mH)	DCR max (Ohms)	Current Rating (A)
0.07 - 10.7	0.004 - 0.262	7.45 - 0.99

ALL DIMENSIONS: INCHES

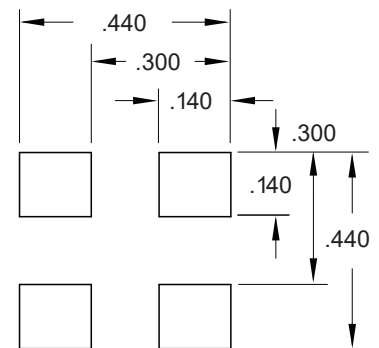


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

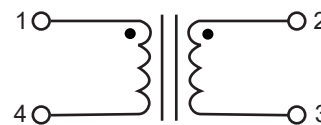
MARKINGS: LASER ETCH OR INK



IN	MM
0.440	11.18
0.410	10.41
0.310	7.87
0.300	7.62
0.140	3.57
0.135	3.43
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)
SCMN7-702*-*.*	0.07	0.004	7.45
SCMN7-173*-*.*	0.17	0.005	6.75
SCMN7-303*-*.*	0.30	0.007	6.53
SCMN7-463*-*.*	0.46	0.011	5.20
SCMN7-673*-*.*	0.67	0.014	4.98
SCMN7-913*-*.*	0.91	0.020	4.10
SCMN7-124*-*.*	1.2	0.029	3.42
SCMN7-154*-*.*	1.5	0.042	2.86
SCMN7-194*-*.*	1.9	0.046	2.72
SCMN7-224*-*.*	2.2	0.081	2.06
SCMN7-274*-*.*	2.7	0.084	1.97
SCMN7-314*-*.*	3.1	0.086	1.89
SCMN7-364*-*.*	3.6	0.087	1.82
SCMN7-424*-*.*	4.2	0.088	1.76
SCMN7-474*-*.*	4.7	0.091	1.70
SCMN7-534*-*.*	5.3	0.118	1.47
SCMN7-604*-*.*	6.0	0.125	1.43
SCMN7-674*-*.*	6.7	0.164	1.25
SCMN7-744*-*.*	7.4	0.172	1.22
SCMN7-824*-*.*	8.2	0.181	1.19
SCMN7-904*-*.*	9.0	0.189	1.16
SCMN7-984*-*.*	9.8	0.251	1.01
SCMN7-105*-*.*	10.7	0.262	0.99

VE PART NUMBER STRUCTURE KEY

EXAMPLE: SCMN7-604S-3-T

INDUCTANCE (uH) (mH)

702 = 70 uH  
224 = 2.2 mH  
904 = 9.0 mH

TERMINATION

S	SnPb
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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") 430  
Pitch between parts: 16 mm  
Tape width: 24 mm

*Tape and Reel not available for Thru-Hole or Gull-Wing Packages*

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