



CMN5 SERIES NANOCRYSTALLINE COMMON MODE CHOKE



COTS+

ELECTRICAL SPECIFICATIONS

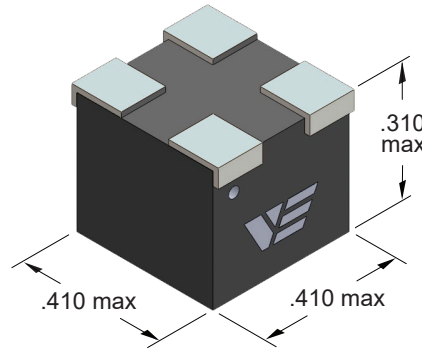
- Operating Temperature: -55°C to +125°C
Storage Temperature: -60°C to +130°C
Temperature Rise: < 30°C
Dielectric Withstanding Voltage: 1000 V_RMS
Overload Current: 1.5 times rated current
Different electrical values available upon request

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
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

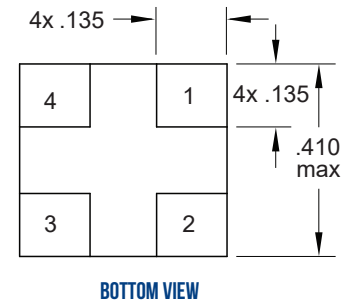
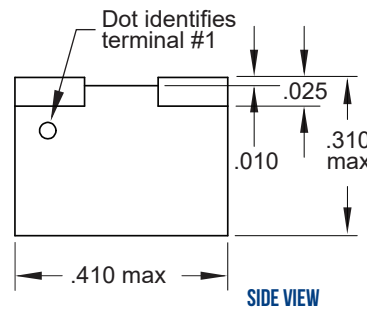
Table with 3 columns: Inductance Range (mH), DCR max (Ohms), Current Rating (A). Values: 0.110 - 4.9, 0.017 - 1.352, 4.9 - 0.55

ALL DIMENSIONS: INCHES

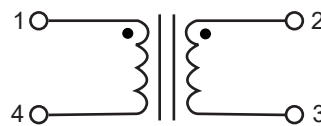
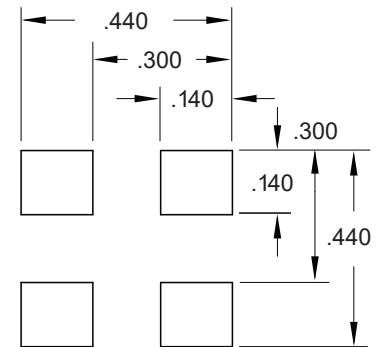


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK



Conversion table with columns IN and MM. Values: 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)



SCHEMATIC

RECOMMENDED MOUNTING PAD CIRCUIT SIDE

CUSTOM DESIGNS & MODIFICATIONS:

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

CMN5 SERIES COTS+ logo





DATA TABLE

| Vanguard P/N | Inductance @ 10kHz ± 30% (mH) | DCR Max (Ohms) | Rated Current (A) |
|--------------|-------------------------------|----------------|-------------------|
| CMN5-113 | 0.11 | 0.017 | 4.90 |
| CMN5-273 | 0.27 | 0.032 | 3.50 |
| CMN5-383 | 0.38 | 0.050 | 2.90 |
| CMN5-503 | 0.50 | 0.070 | 2.40 |
| CMN5-723 | 0.72 | 0.100 | 2.00 |
| CMN5-104 | 1.0 | 0.150 | 1.60 |
| CMN5-154 | 1.5 | 0.300 | 1.20 |
| CMN5-204 | 2.0 | 0.430 | 1.00 |
| CMN5-264 | 2.6 | 0.600 | 0.82 |
| CMN5-304 | 3.0 | 0.820 | 0.70 |
| CMN5-364 | 3.6 | 1.150 | 0.59 |
| CMN5-394 | 3.9 | 1.210 | 0.58 |
| CMN5-454 | 4.5 | 1.300 | 0.56 |
| CMN5-494 | 4.9 | 1.350 | 0.55 |

1/ Inductance measured at 10 kHz, 0.10 V_{RMS}

2/ DCR measured at room ambient temperature (25°C)

VE PART NUMBER STRUCTURE KEY

INDUCTANCE (uH) (mH)

273 = 270 uH
154 = 1.5 mH
454 = 4.5 mH

EXAMPLE: CMN5-273S-1-T

TERMINATION

| | |
|---|----------|
| S | SnPb |
| R | Pure Tin |

RELIABILITY

| | |
|---|---------|
| 1 | COTS/EM |
| 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

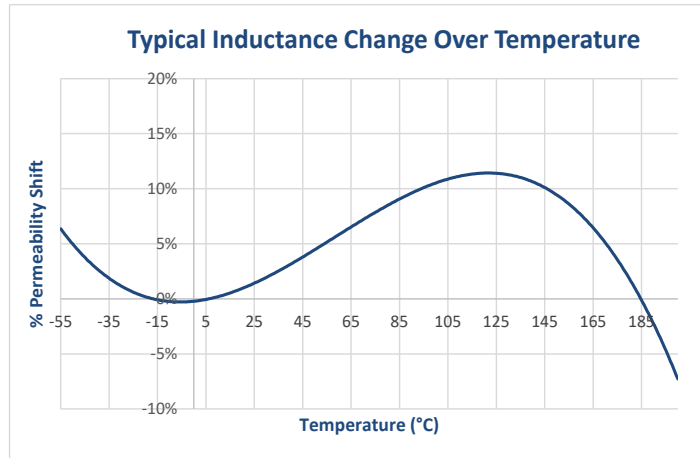
CUSTOM DESIGNS & MODIFICATIONS:

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

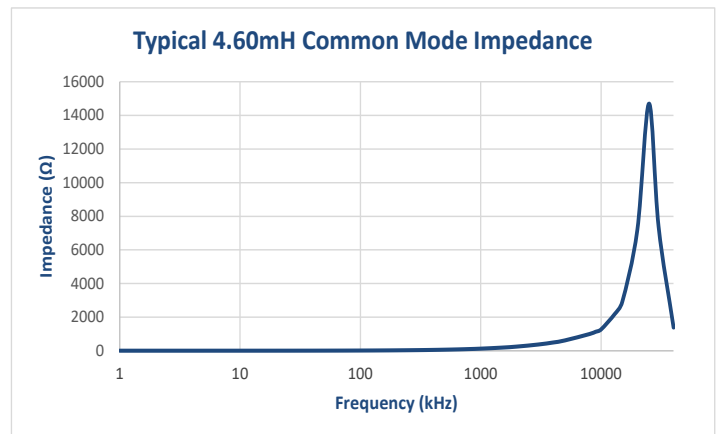
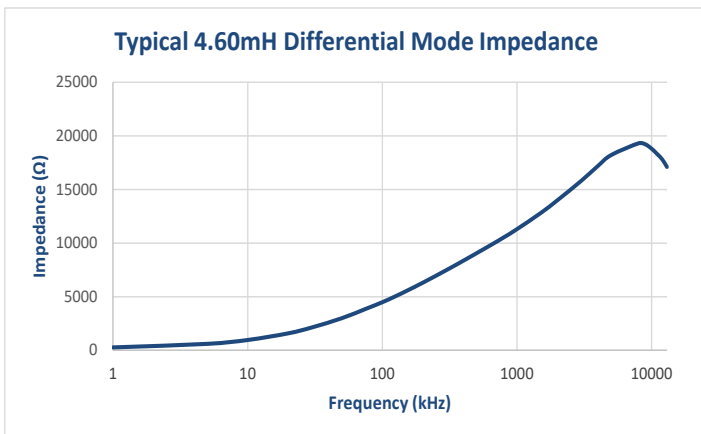
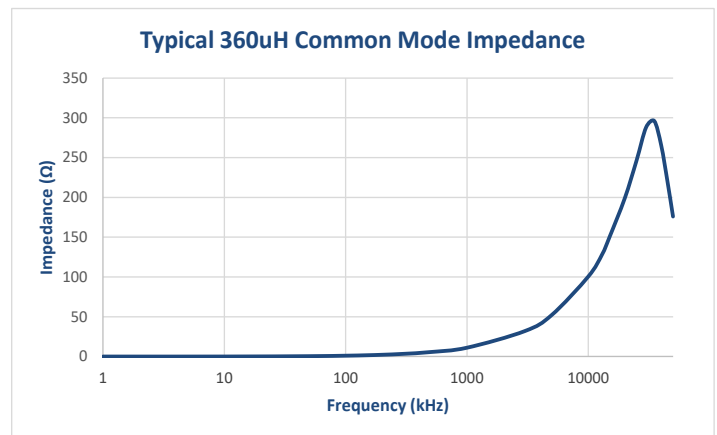
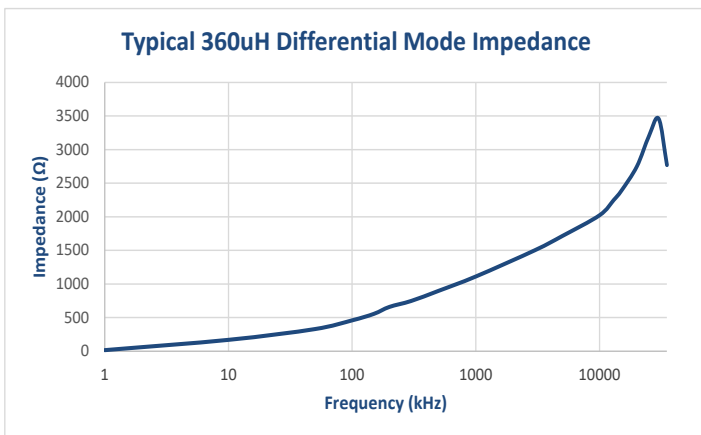




PERMEABILITY STABILITY CURVE VERSUS TEMPERATURE



COMMON MODE AND DIFFERENTIAL MODE IMPEDANCE CURVES



CUSTOM DESIGNS & MODIFICATIONS:

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

CMN5 SERIES

