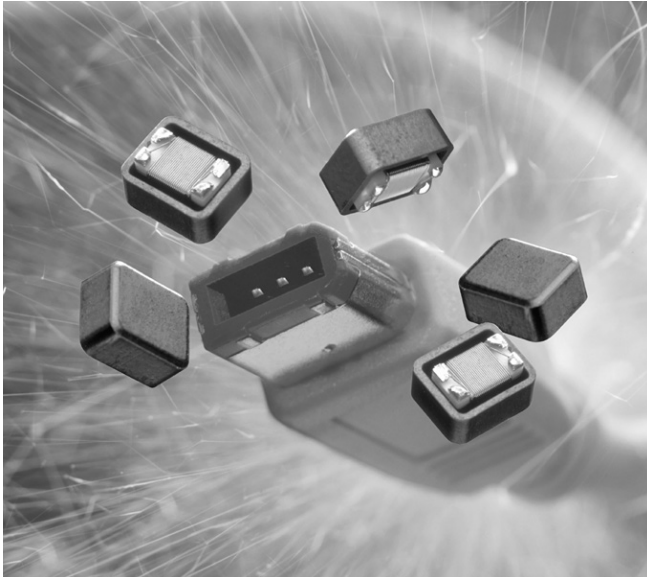




IEEE 1394 Common Mode Choke



- Designed for IEEE 1394 and other high-speed twisted pair interfaces.
- Shielded 1812 size filter
- Provides over 21 dB attenuation of common mode noise at 400 MHz with a cutoff frequency of 1.2 GHz

Core material Ferrite

Terminations RoHS compliant gold over nickel over moly-manganese

Weight: 30 mg

Ambient temperature -40°C to +85°C with Irms current.

Maximum part temperature +100°C (ambient + temp rise).

Storage temperature Component: -40°C to +100°C.

Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 600/7" reel; 2200/13" reel Plastic tape: 12 mm wide, 0.25 mm thick, 8 mm pocket spacing, 3.9 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

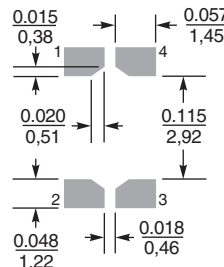
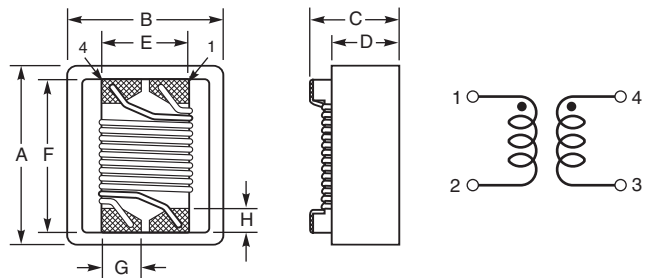
Part number ¹	Common mode peak impedance (kOhms)	Cutoff frequency ² (GHz)	Common mode attenuation typ (dB)			Inductance ³ min (nH)	DCR max ⁴ (Ohms)	Isolation ⁵ (Vrms)	Irms ⁶ (A)
			100 MHz	400 MHz	500 MHz				
CM1394L_	0.813 @ 660 MHz	1.2	11.1	21.1	22.7	0.22	0.105	50	1.5

1. When ordering, please specify **packaging** code:

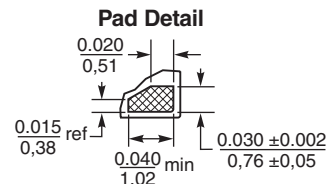
CM1394LC

- Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (600 parts per full reel).
 B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.
 D = 13" machine-ready reel. EIA-481 embossed plastic tape (2200 parts per full reel).

2. Frequency at which the differential mode attenuation equals -3 dB
 3. Inductance measured at 100 MHz
 4. DCR is specified per winding.
 5. Winding to winding isolation (hipot) tested for one minute.
 6. Current per winding that causes a 15°C rise from 25°C ambient.
 7. Electrical specifications at 25°C.
 Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Recommended Land Pattern

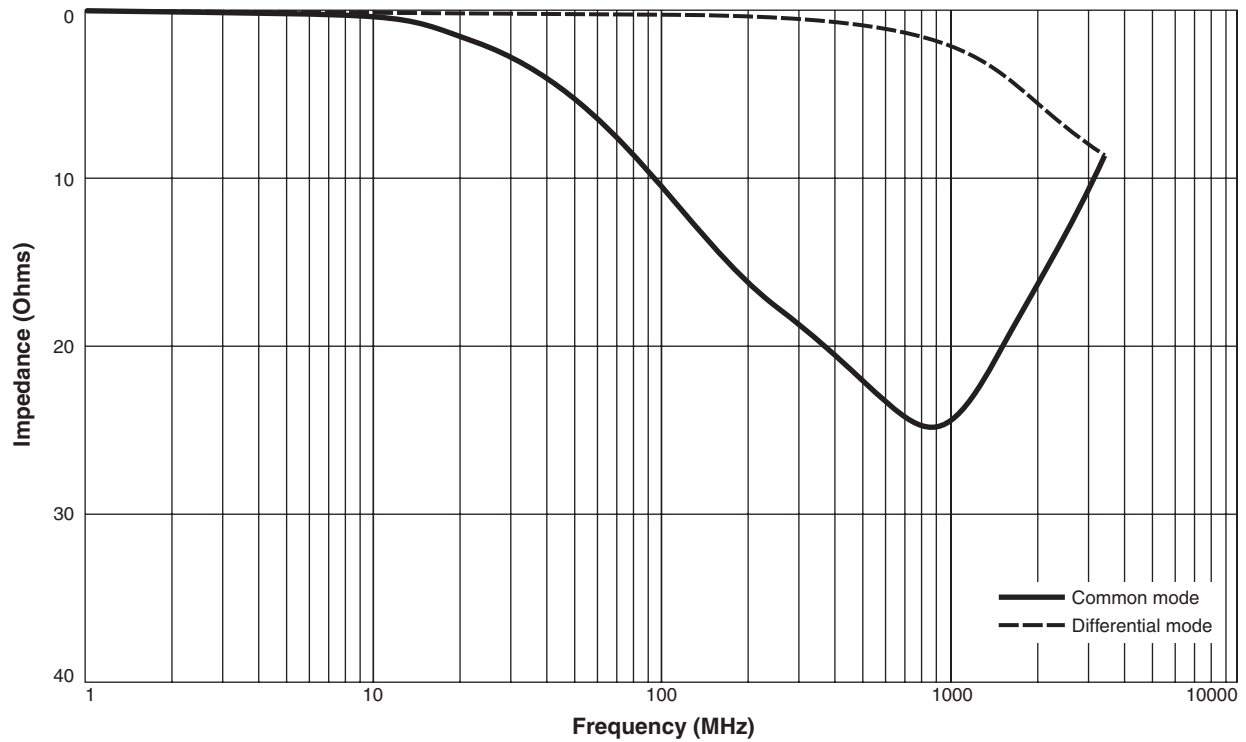


A max	B max	C max	D ref	E ref	F ref	G min	H
0.231	0.196	0.150	0.107	0.100	0.178	0.04	0.03
5,87	4,98	3,81	2,72	2,54	4,52	1,02	0,76

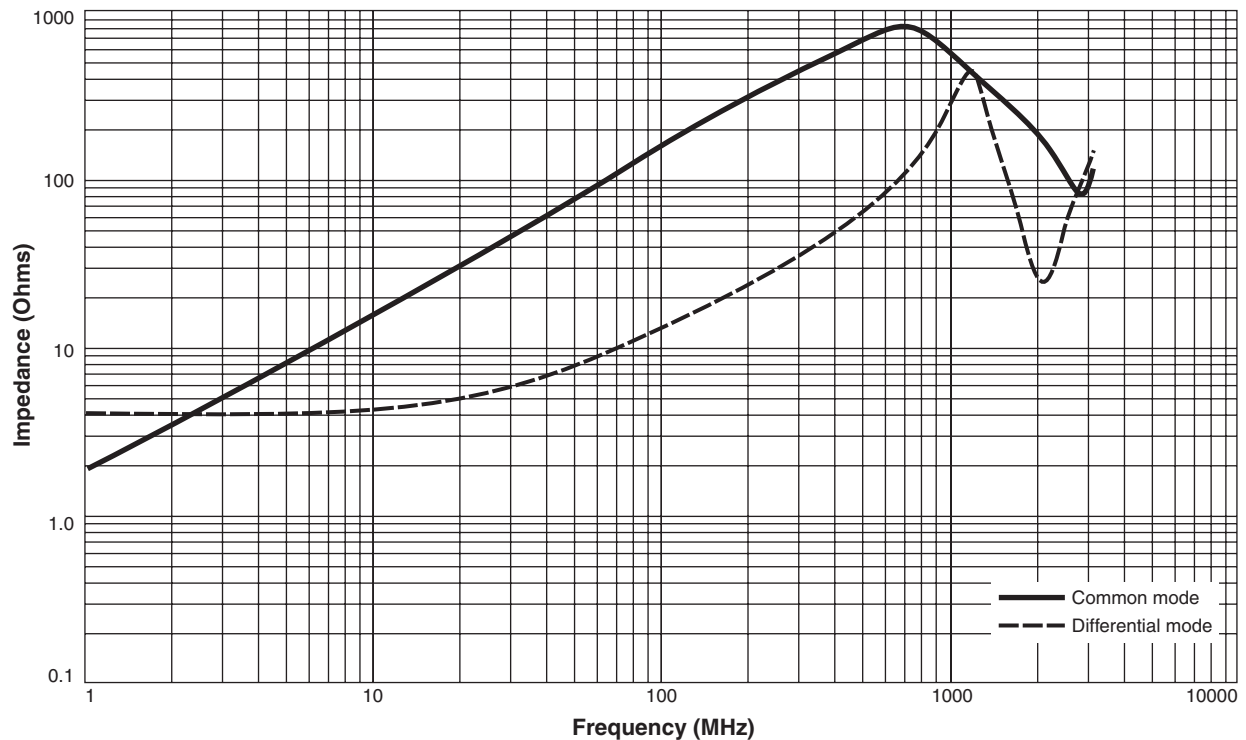


IEEE 1394 Common Mode Choke

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



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