

NEW!

Ultra Low Profile Common Mode Choke 0805



- For noise suppression in super high speed signal lines: USB 3.x, HDMI 2.0, HDBaseT™, DisplayPort, DVI, etc.; and in high speed differential signal lines: USB 2.0, IEEE1394, LVDS, etc.
- Up to 6.5 GHz differential mode 3 dB cutoff frequency; up to 35 dB common mode noise attenuation in GHz range
- Lowest profile 0805 common mode choke – 0.93 mm tall

Core material Ferrite**Environmental** RoHS compliant**Terminations** Matte tin over nickel over silver-platinum-glass frit.**Weight** 9.0 – 13.0 mg**Ambient temperature** –40°C to +125°C with Irms current.**Maximum part temperature** 140°C**Storage temperature** Component: –40°C to +155°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 2000/7" reel; 7500/13" reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.07 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 impedance typ (Ohms)			Common mode attenuation typ (dB)			Inductance ² min (nH)	DCR max ³ (Ohms)	Isolation ⁴ (Vrms)	Irms ⁵ (mA)
	10 MHz	100 MHz	500 MHz	10 MHz	100 MHz	500 MHz				
0805USBN-121MR_	2	12	57	0.04	0.5	5.0	14	0.11	250	500
0805USBN-271MR_	3	27	125	0.09	1.4	10.0	30	0.14	250	500
0805USBN-481MR_	5	48	231	0.13	3.5	14.7	53	0.22	250	500
0805USBN-701MR_	7	70	342	0.18	5.3	17.4	77	0.235	250	500
0805USBN-941MR_	10	94	493	0.30	7.6	21.1	105	0.27	250	500
0805USBN-132MR_	13	130	697	0.50	10.0	24.4	140	0.32	250	500
0805USBN-162MR_	17	165	955	0.78	12.1	27.3	182	0.37	250	450
0805USBN-222MR_	24	225	1310	1.14	14.0	30.0	252	0.63	250	350

1. When ordering, please specify **packaging** code:**0805USBN-222MRC****Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 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 (7500 parts per full reel).

2. Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.

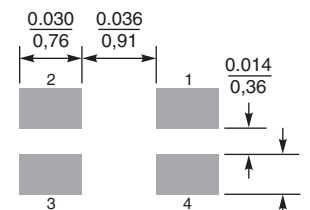
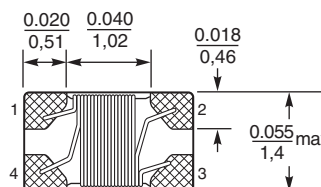
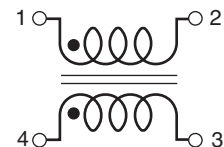
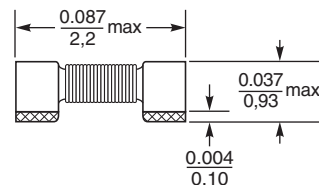
3. DCR is specified per winding.

4. Winding to winding isolation (hipot) tested for one minute.

5. Current per winding that causes a 15°C rise from 25°C ambient.

5. Electrical specifications at 25°C.

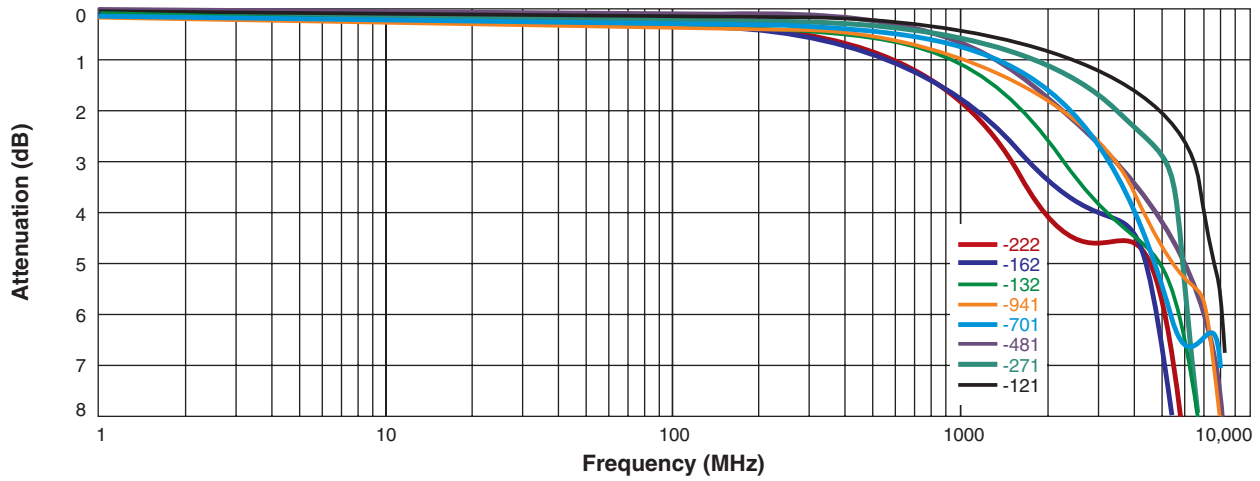
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Dimensions are in $\frac{\text{inches}}{\text{mm}}$ **Recommended Land Pattern**

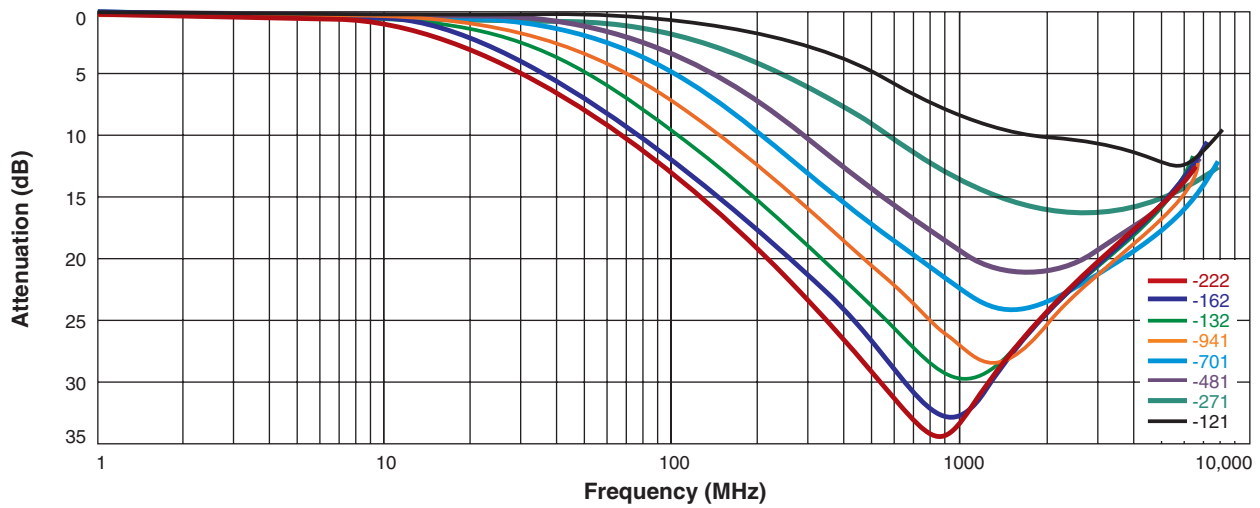
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Ultra Low Profile Common Mode Choke – 0805

Typical Differential Mode Attenuation (Ref: 50 Ohms)



Typical Common Mode Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency

