

NEW!

Low Profile USB Common Mode Choke ZE2401-AE



- Common mode choke suitable for use in FPD-Link III & FPD-Link IV up to 13.5 Gbps link rates
- Attenuate common mode signal with minimal effect on differential signal in forward channel and backchannel for maintaining stable signal integrity

Core material Ferrite

Environmental RoHS compliant

Terminations Matte tin over nickel over silver-palladium-glass frit.

Weight 14.7 – 15.5 mg

Ambient temperature –40°C to +125°C with Irms current.

Maximum part temperature 140°C

Storage temperature Component: –40°C to +140°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)

Packaging 2000/7" reel; 7500/13" reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.295 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 (mA)
			10 MHz	100 MHz	500 MHz				
ZE2401-AE_	>0.16 @ >3.0 GHz	>5.0	1.5	5.3	7.1	30	0.35	250	100

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

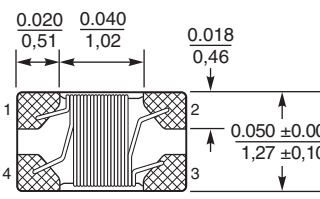
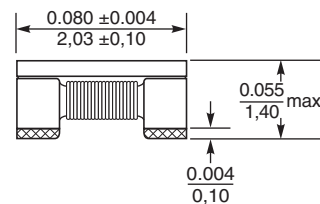
ZE2401-AEC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

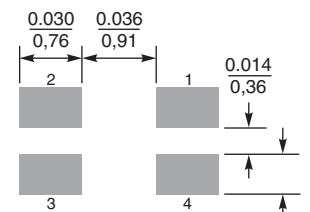
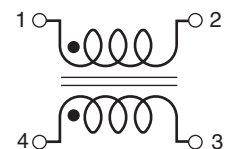
D = 13" machine-ready reel. EIA-481 embossed plastic tape (7500 parts per full reel).

- Frequency at which the differential mode attenuation equals –3 dB
- Inductance measured at 100 MHz using an Agilent/HP 4286A impedance analyzer and a Coilcraft SMD-A fixture.
- DCR is specified per winding.
- Winding to winding isolation (hipot) tested for one minute.
- Current per winding that causes a 15°C rise from 25°C ambient.
- Electrical specifications at 25°C.

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



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

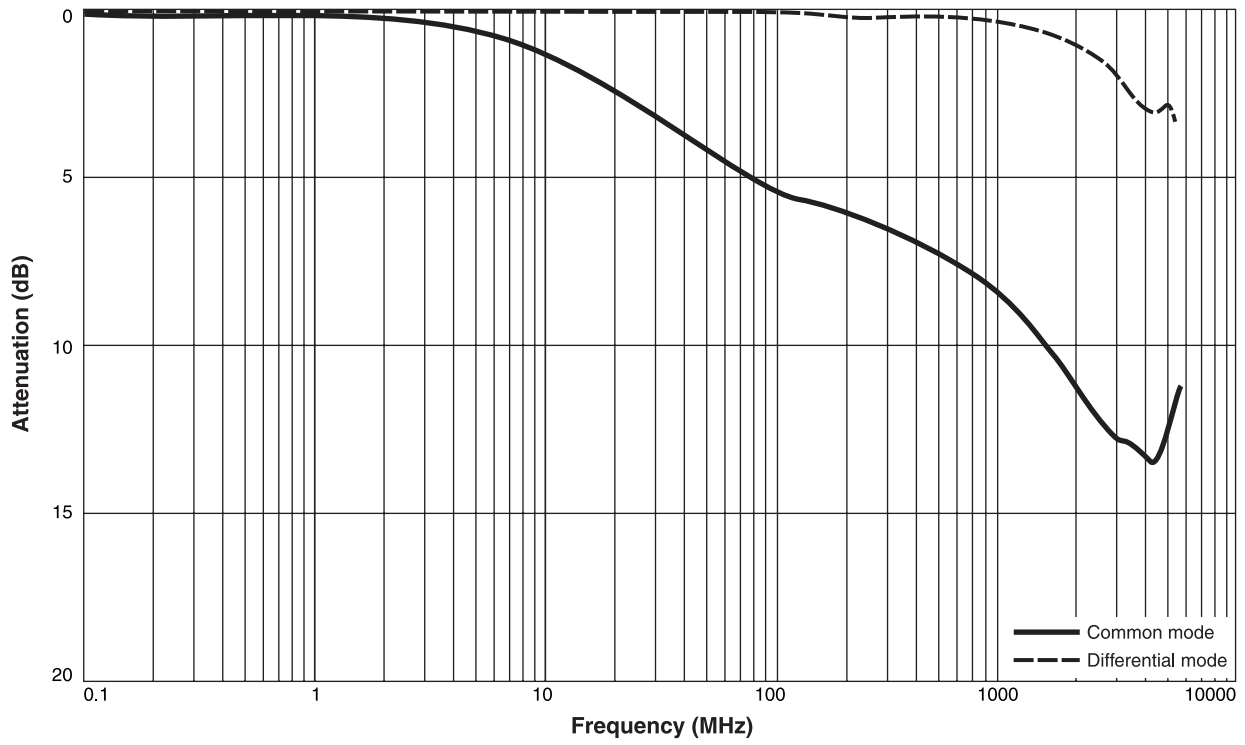


Recommended Land Pattern

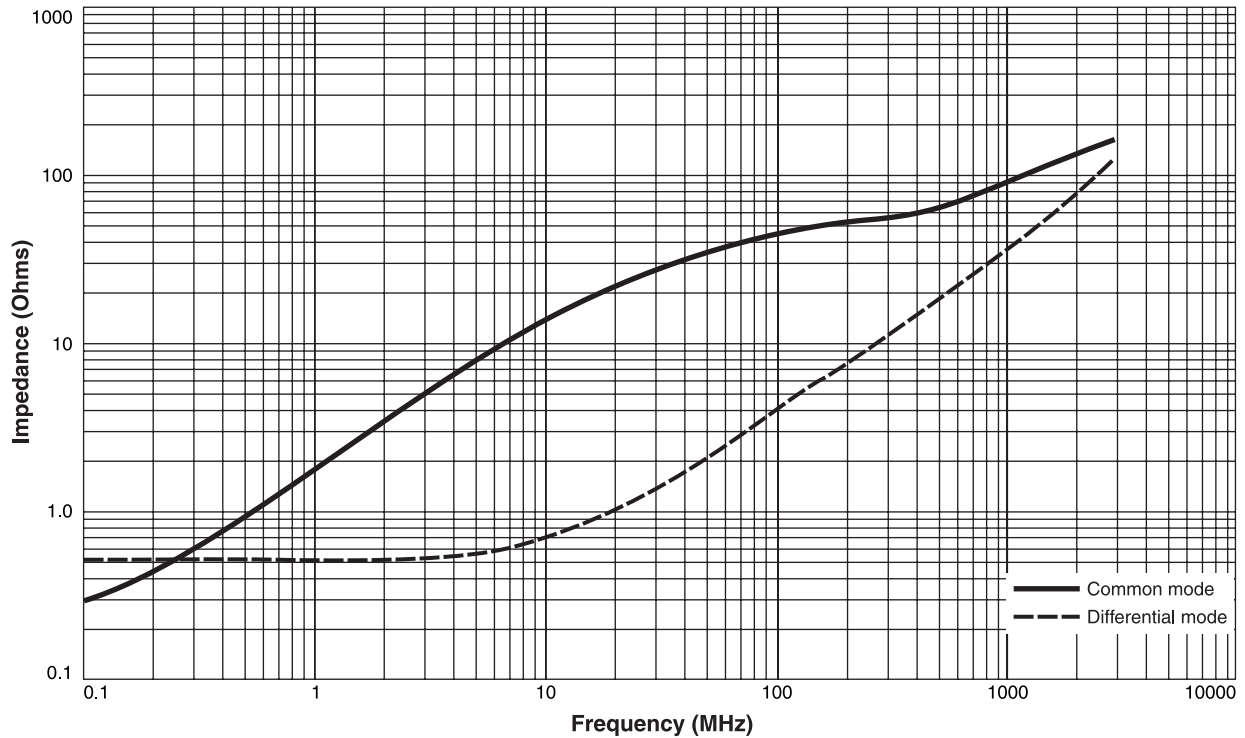


USB 2.0, 3.x Common Mode Filter – 0805USBF

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



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