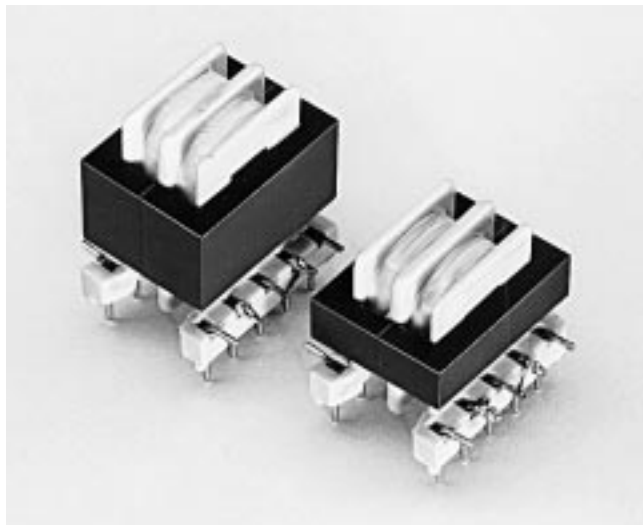


Common Mode Line Chokes – EE Styles



- Low cost
- VDE, IEC, UL, CSA compatible
- 3750 VRMS isolation between windings
- UL approved Class 130°C insulation system available (UL File E83628)
- Industry-standard EE25 size
- Wide range of available inductances and current ratings

Coilcraft **Designer's Kit No. P202** contains samples of 8 standard EE and toroidal common mode line chokes. To order, please contact Coilcraft.

Coilcraft common mode standard packages incorporate several features to help meet the requirements of all major international safety agencies. These include 2mm thick center flanges and 3mm creepage and clearance from all terminations to the core.

Common mode chokes are used to greatly reduce AC line conducted interference produced by switching power supplies. This configuration produces opposing magnetic fluxes in the core that serve to cancel inphase noise signals appearing across the AC line.

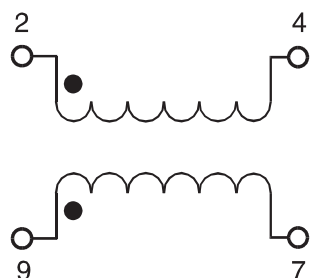
This mode allows much more filtering capability in a given core size than would be possible using

differential filtering alone. Use of common mode chokes therefore reduces component count as well as inductor size.

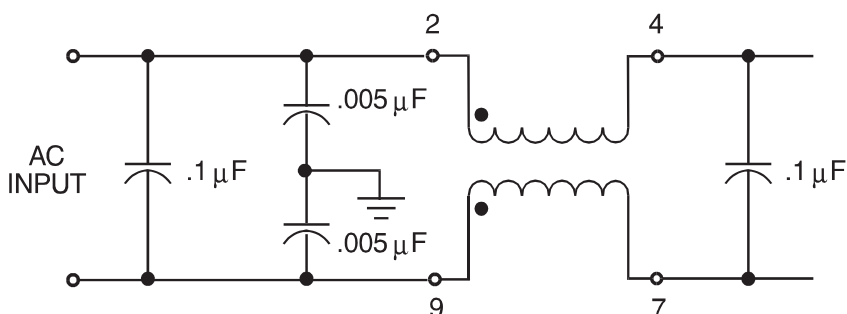
Combining both common and differential mode chokes gives the power supply designer the added flexibility required to adjust the filtering to meet FCC, VDE, and other requirements as well as optimize the circuit for the particular noise levels and frequencies produced by each power supply design.

The Coilcraft packaging of common mode chokes allows windings to be balanced within 1% and features the cost effectiveness of standard EE core styles.

SCHEMATIC



TYPICAL APPLICATION



Coilcraft

Document 141-1 Revised 6/6/95

Common Mode Line Chokes – EE Styles

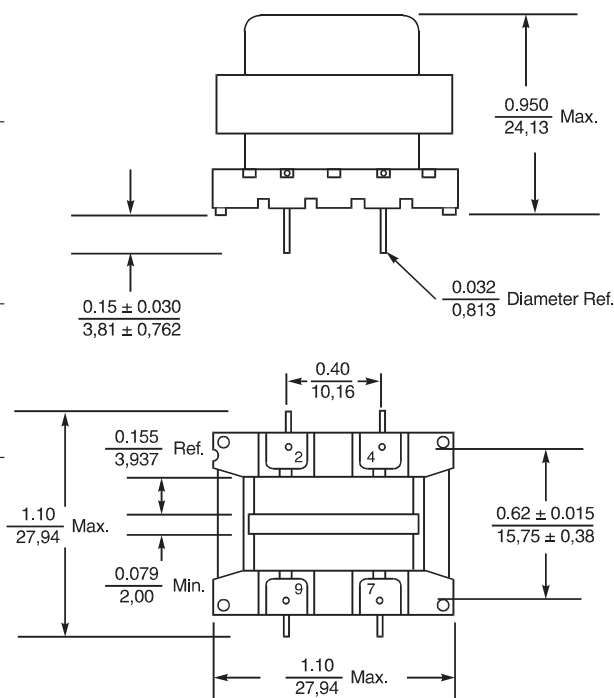
STANDARD EE LINE CHOKES

Part Number	Current Rating ¹	R _{DC} Max Ohms	Inductance Min ²
E3490-A	500 mA	.980	9.9 mH
E3491-A	750 mA	.390	3.9
E3492-A	1 Amp	.270	2.9
E3493-A	1 1/4 Amp	.190	2.1
E3494-A	1 1/2 Amp	.105	1.1
E3495-A	2 Amp	.069	731 μH
E3496-A	2 1/2 Amp	.044	468
E3497-A	3 Amp	.029	299
E3498-A	4 Amp	.016	168

¹ Based on 300 circular mils/Amp. Temperature rise is less than 10°C.

² Per section. Typical values will run approximately 30% higher than published minimums.

Parts in bold type are included in Coilcraft Designer's Kit No. P202.

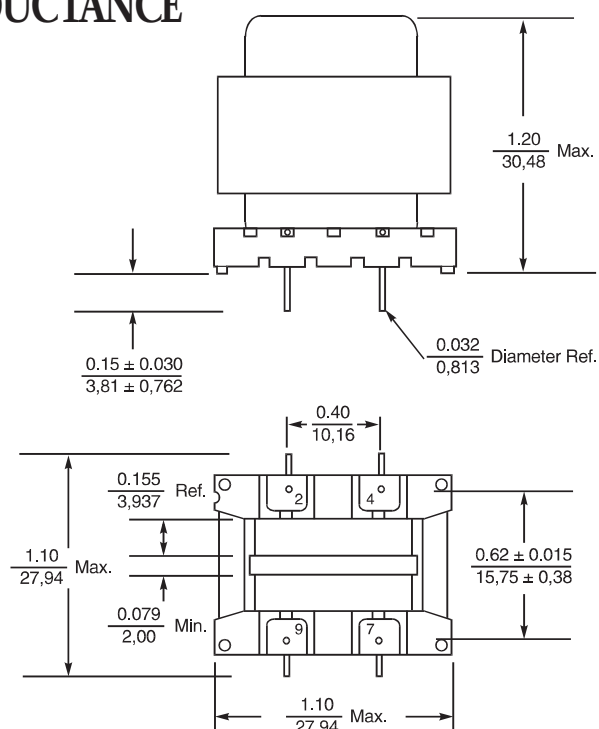


STANDARD EE LINE CHOKES — HIGH INDUCTANCE

Part Number	Current Rating ¹	R _{DC} Max Ohms	Inductance Min ²
E3499-A	500 mA	1.260	16.8 mH
E3500-A	750 mA	.500	6.6
E3501-A	1 Amp	.350	4.9
E3502-A	1 1/4 Amp	.230	3.6
E3503-A	1 1/2 Amp	.130	1.87
E3504-A	2 Amp	.087	1.24
E3505-A	2 1/2 Amp	.055	796 μH
E3506-A	3 Amp	.037	508
E3507-A	4 Amp	.022	286

¹ Based on 300 circular mils/Amp. Temperature rise is less than 10°C.

² Per section. Typical values will run approximately 30% higher than published minimums.



For custom values or information on toroidal common mode line chokes, please contact Coilcraft.

Coilcraft

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