



Laird Technologies' monolithic common mode chokes are designed for power and data line EMI filtering where high current, small size or high frequency performance is required. This family of compact ferrite parts provides EMI suppression on conductors such as PC board traces and high speed input/output circuitry (including network and storage subsystems).

Features:

Monolithic
Compact
High current carrying capability (up to 10 amps continuous)
Excellent high frequency performance
Very low DCR to minimize circuit resistance
Smaller, lighter and less susceptible to vibration than wire-wound chokes
Lead Free
Stable Impedance Under Load

Applications:

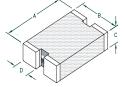
• Filtering DC power on PC boards, especially in applications of greater than 3.0 amps • Filtering common mode EMI on high speed data lines • PCMCIA products • Filtering for Bellcore Telecom applications • Filtering on USB power lines • Disk drives

Test Specifications:

• Maximum current ratings are determined by testing to a maximum temperature rise of 40°C with continuous operating current. • Board level components are rated up to a maximum of 75 volts • Part performance is shown with curves for Common, Open and Normal Mode Impedances. **Common Mode** Impedance is the impedance of EMI noise conducted in the same direction along two conductors. **Open Mode** Impedance is the impedance measured across a single leg of the common mode choke. **Normal Mode** Impedance is the total impedance to the differential circuit (both out and back).

PART NUMBERING SYSTEM EXAMPLE

<u>CM</u>	<u>3322</u>	<u>P</u>	400	<u>R</u>	<u>-10</u>
Product Series	Part Size	Rated Continuous	Impedance Value	Packaging	Additional
Code	Code	Current Code	Code	Code	Description

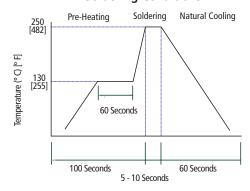


Ambient Operating Temperature Range: -40°C to + 125°C

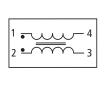
See Data Curves on Back

PART NUMBER	Fig #	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	IMPEDANCE (Z) OHMS @			Typical	Peak	DCR	RATED
						Nominal 100 MHz	Typical 500 MHz	Typical 1 GHz	Peak Impedance (Ω)	Impedance Frequency (MHz)	MAX (Ohms)	I MAX (continuous) mA
CM3322P400R-10	1	8.50 (0.335)	5.60 (0.220)	2.10 (0.083)	2.24 (0.088)	40	121	185	251	1931	0.030	4000
CM3322U610R-10	1	8.50 (0.335)	5.60 (0.220)	2.10 (0.083)	2.24 (0.088)	61	123	170	191	1581	0.015	7000
CM3322X630R-10	1	8.50 (0.335)	5.60 (0.220)	2.85 (0.112)	2.24 (0.088)	63	114	152	165	1459	0.008	10000
CM1922X330R-10	2	4.70 (0.185)	5.60 (0.220)	2.85 (0.112)	2.24 (0.088)	33	64	86	93	1783	0.003	10000

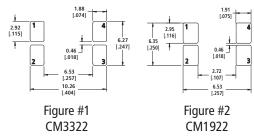
Recommended Lead Free Soldering Conditions



Equivalent Circuit



Land Patterns





www.lairdtech.com

SIP-SPEC-MONOLITHICCMC-0208

Common Mode Bead Impedance

