



Low Profile Surface Mount Common Mode Chokes

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:

CM1922X330R-10

• 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>		A	
Product Series Code	Part Size Code		Rated Continuous Current Code		Impedance Value Code		Packaging Code		Additional Description			
Ambient Operating Temperature Range: -40°C to + 125°C See Data Curves on Back												
DADT	Fin	А	В	с	D	IMPEDANCE (Z) OHMS @		IMS @	Typical	Peak	DCR	RATED
NUMBER	#	mm (inches)	mm (inches)	mm (inches)	mm (inches)	Nominal 100 MHz	Typical 500 MHz	Typical 1 GHz	Impedance (Ω)	Frequency (MHz)	MAX (Ohms)	(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

33

64

86

93

Recommended Lead Free Soldering Conditions

2

4.70

(0.185)

5.60

(0.220)

2.85

(0.112)



Equivalent Circuit

2.24

(0.088)





0.003



1783

10000

Common Mode Bead Impedance





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