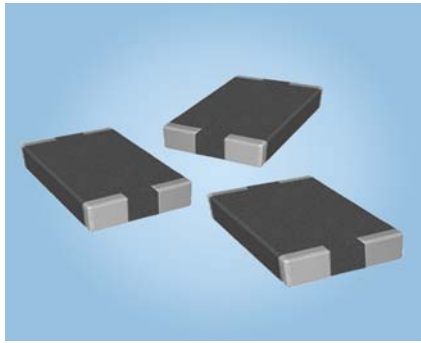


Low Profile, Surface Mount Common Mode Chokes



Steward's monolithic surface mount 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 (tracks) and high speed input/output circuitry (including network and storage subsystems). These are the industry's only true monolithic common mode chokes.

Features:

- Monolithic • Compact • High current carrying capability (up to 10 amps continuous) • Excellent ultra-high frequency performance
- Very low DCR to minimize signal distortion • Smaller, lighter and less susceptible to vibration than old-style wire-wound chokes

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:

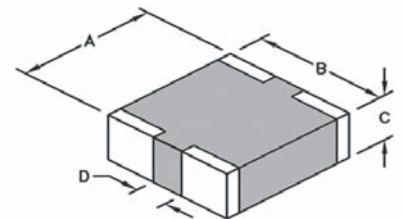
- Maximum current ratings are determined by testing to a maximum temperature rise of 40°C with continuous operating current.
- Board level components are rated up to a maximum of 75 volts • Part performance is shown with curves for Common, Open and Normal Mode Impedances measured along two conductors. **Common Mode** Impedance is the impedance of EMI noise conducted in the same direction along two conductors. **Open Circuit** 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).

Tested with: • Agilent E4991A (1MHz - 3.0 GHz) or HP8753 (to 6 GHz) Network/Spectrum Analyzer • HP43961A Impedance Test Kit • HP16194A Test Fixture or Inter-Continental Microwave custom fixtures • HP16200A DC Bias Adapter • Philips PM2811 DC Power Supply • Ambient Temperature 23.5°C ± 2° • Bandwidth 3 kHz • Sweep Time 423 ms • Impedance is rated at ± 25% @100MHz

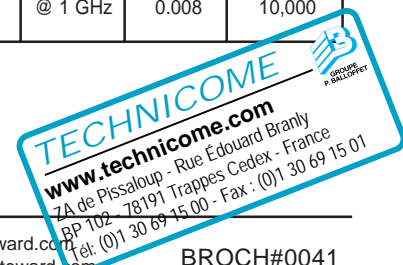
Ambient Operating Temperature Range: -55°C to + 125°C

See Curves on Back

STEWARD PART NUMBERING SYSTEM					
CM	1812	U	600	R	- 00
PRODUCT SERIES CODE	PART SIZE CODE	RATED CURRENT CODE	IMPEDANCE VALUE CODE	PACKAGING CODE	ADDITIONAL DESCRIPTION



PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	IMPEDANCE (Z) TYPICAL OHMS @			Peak Impedance Frequency	DCR MAX (Ω)	RATED I MAX continuous (mA)
					100MHz	500MHz	1GHz			
CM1812U600R-00	4.57 ± 0.25 (0.180 ± 0.010)	3.05 ± 0.25 (0.120 ± 0.010)	1.16 ± 0.25 (0.064 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	60	100	120	> 1 GHz	0.015	7,000
CM3312N121R-00	8.38 ± 0.25 (0.330 ± 0.010)	3.05 ± 0.25 (0.120 ± 0.010)	1.16 ± 0.25 (0.064 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	120	200	250	> 1 GHz	0.035	3,000
CM3322T121R-00	8.38 ± 0.25 (0.330 ± 0.010)	5.60 ± 0.25 (0.220 ± 0.010)	3.23 ± 0.25 (0.127 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	120	220	240	@ 1 GHz	0.015	6,000
CM1922X600R-00	4.70 ± 0.25 (0.185 ± 0.010)	5.60 ± 0.25 (0.220 ± 0.010)	3.23 ± 0.25 (0.127 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	60	100	100	@ 1 GHz	0.008	10,000



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