Mulitilayer Chip Common Mode Filter-MCM- Series

MCM series For USB 2.0/ IEEE1394/ LVDS

Features

1.Monolithic morganic meteral construction

2.Closed magnetic circuit avoids crosstalk

3.Suitable for flow and reflow soldering.

Effective for common mode noise suppression digital

4.equipment which radiation from cables.

Applications

1.Excellent solderability and heat resistance

2.High reliability

3.Used as acommon mode filter for usb2.0&IEEE13394

Product Identification

MCM 2012B- 121 - PF

MCM: SERIES NAME

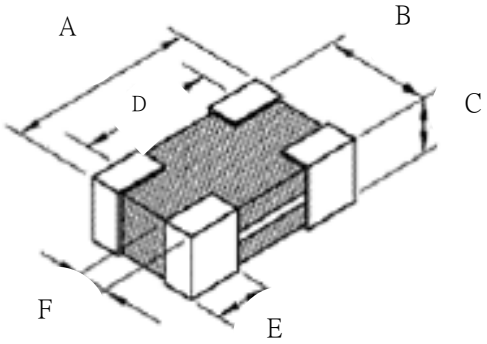
2012:DIMENSION SIZE CODE

B:Material Type CODE

121: IMPEDANCE CODE.

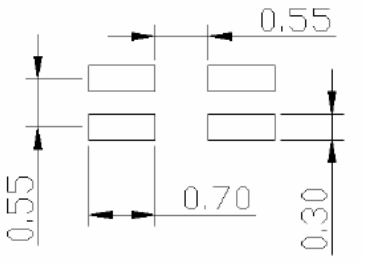
PF: Pb Free

Dimensions (mm)

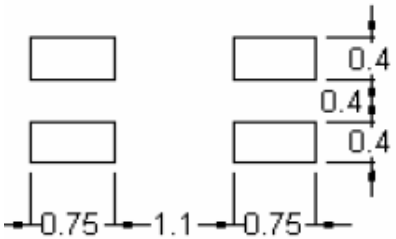


SERIES	A	B	C	D	E	F
MCM1012	1.0±0.1	1.25±0.1	0.82±0.1	0.5±0.1	0.2±0.1	0.3±0.1
MCM2012	2.0±0.2	1.25±0.2	1.0±0.2	1.6±0.2	0.4±0.2	0.3±0.2

Recommended Pattern(mm)



MCM1012



MCM2012

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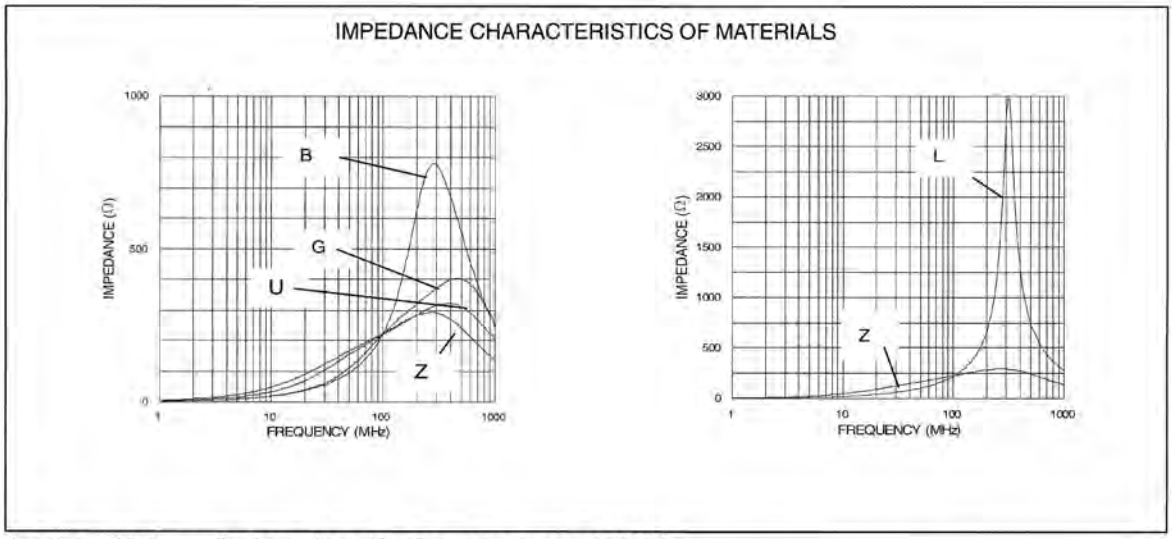
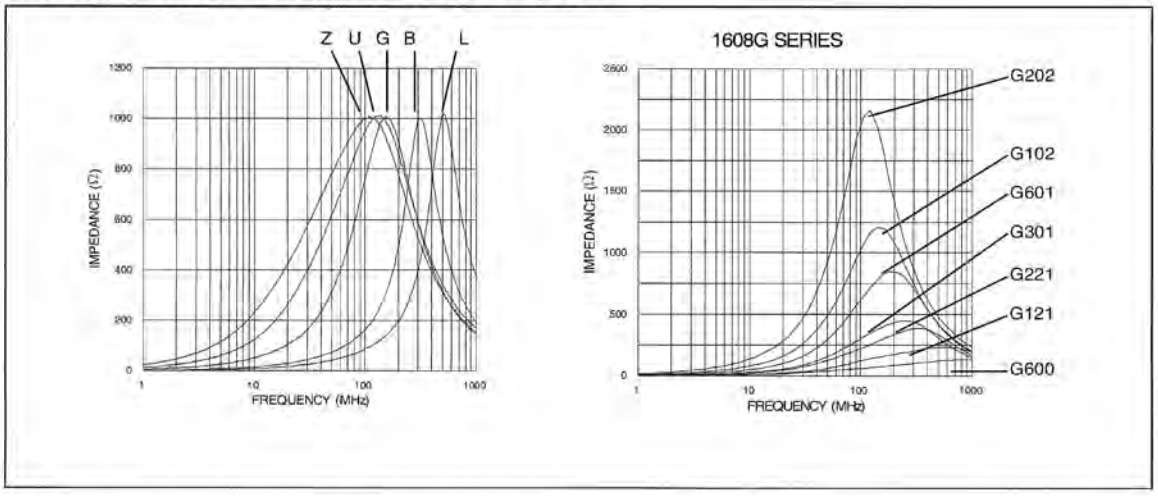
MATERIAL CHARACTERISTICS

		Material Code				
ITEM	UNIT	L	B	G	U	Z
Initial Permeability μ_{iac}	-	25	45	110	200	500
Maximun Permeability μ_M	-	125	125	250	450	900
Saturation Flux Density at 10 Oe Bs	Gauss	2000	2000	1700	1400	1500
Curie Temperature Tc	℃	＞200	＞200	＞130	＞130	＞100
Volume Resistivity ρ	Ω-m	105	105	105	105	105
Temperature Coefficient(Inductance)	10^{-4}/℃	10		12	13	5
Density	g/cm^3	4.8		4.8	4.8	4.8



✧Z Material is for applications whose blocking region is near 100 MHz.
✧L material, an improvement of B material, has sharp impedance characteristics at high frequency.
✧G material is for application whose signal frequency is far from the cut off region. Suitable for application requires low insertion loss at high frequency.
✧Please confirm the signal waveform to choose suitable products.



✧ Different materials are available for different application range.
✧ With one material, higher impedance has sharper characteristics.

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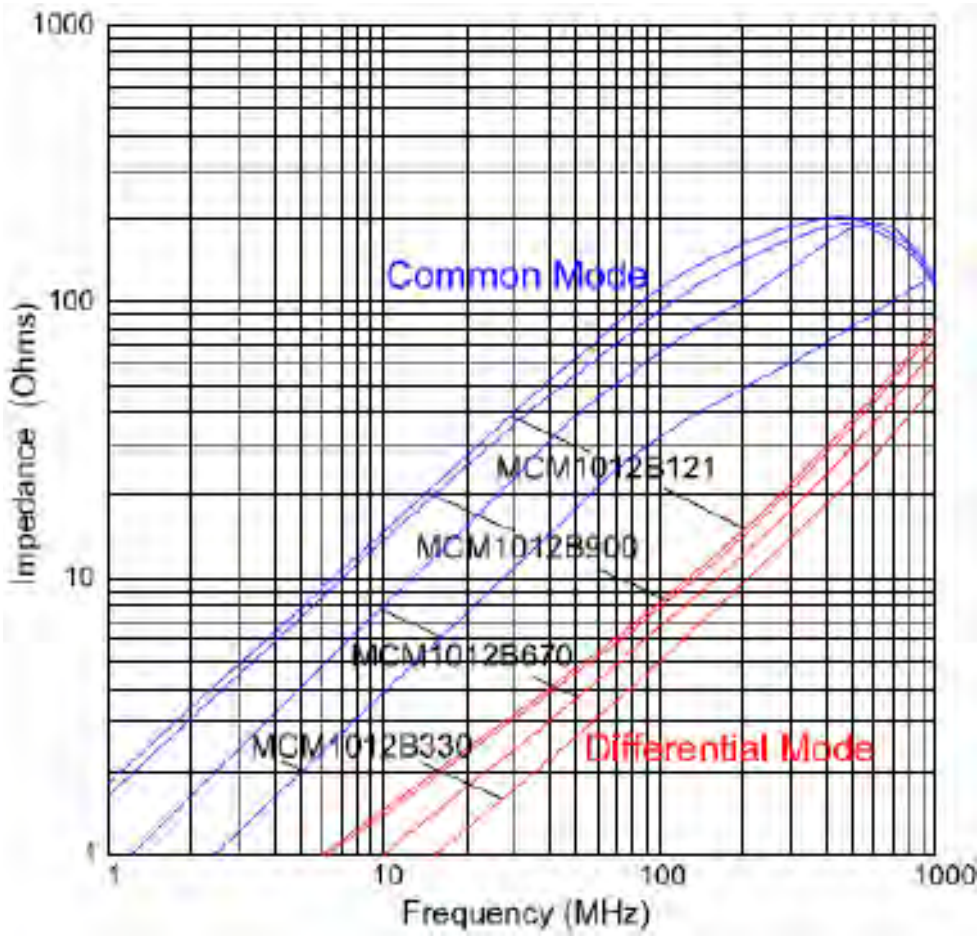
Part Number	Test Frepuency (MHz)	Impedance (Ω±25%)	DC Resietance (Ω)max	Rated current (mA)max	Rated voltage Vdc
MCM1012B-330-PF	100/60mV	33	0.50	300	10
MCM1012B-670-PF	100/60mV	67	0.50	300	10
MCM1012B-900-PF	100/60mV	90	0.60	300	10
MCM1012B-121-PF	100/60mV	120	0.60	300	10

Test Instruments:HP4291A Impedance / Material Analyzer



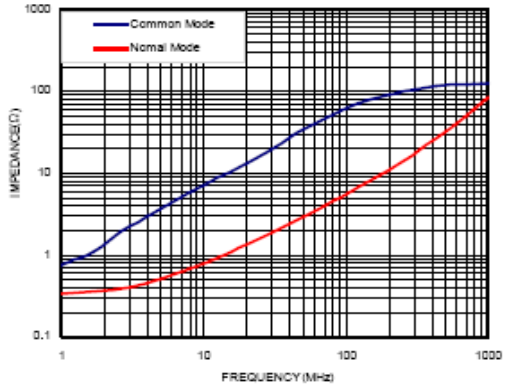
Mulitilayer Chip Common Mode Filter-MCM- Series

MCM series For USB 2.0/ IEEE1394/ LVDS

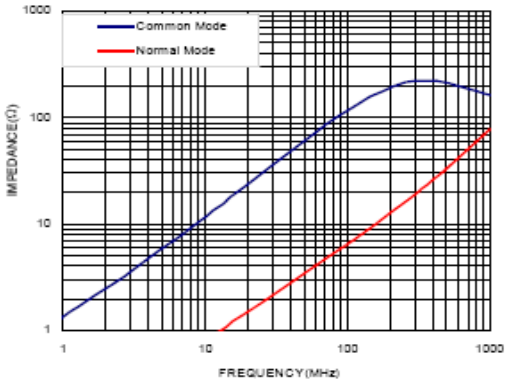
Part Number	Test Frepuency (MHz)	Impedance (Ω±25%)	DC Resietance (Ω)max	Rated current (mA)max	Rated voltage Vdc
MCM2012B-670-PF	100/60mV	67	0.60	400	10
MCM2012B-900-PF	100/60mV	90	0.70	400	10
MCM2012B-121-PF	100/60mV	120	0.85	400	10
MCM2012B-161-PF	100/60mV	160	1.00	350	10
MCM2012B-221-PF	100/60mV	220	1.20	300	10

Test Instruments:HP4291A Impedance / Material Analyzer

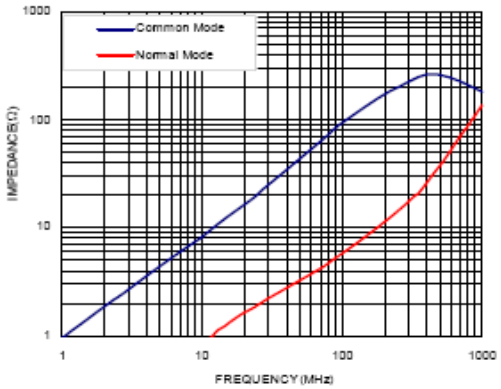
MCM2012B-670-PF



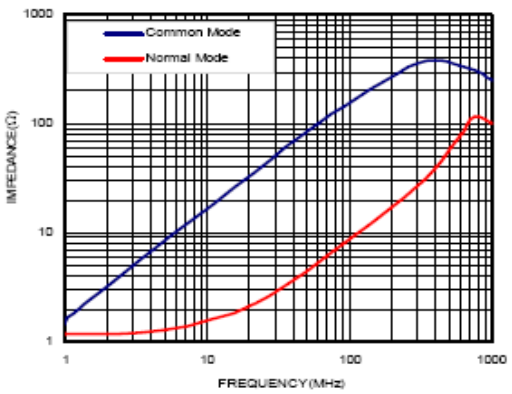
MCM2012B-900-PF



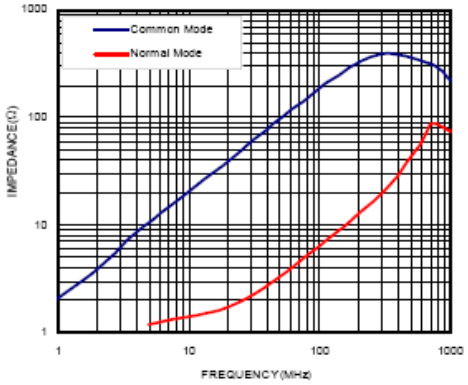
MCM2012B-121-PF



MCM2012B-161-PF



MCM2012B-221-PF



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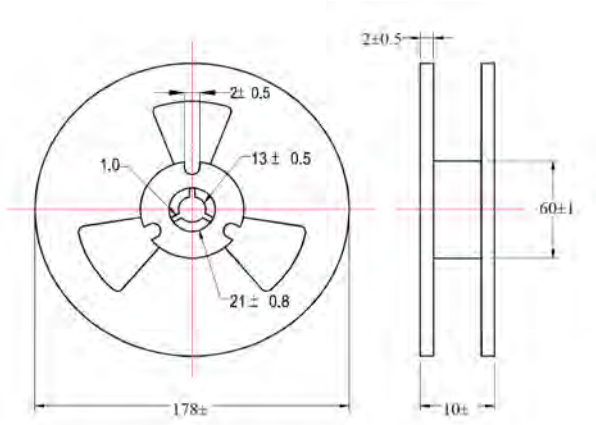
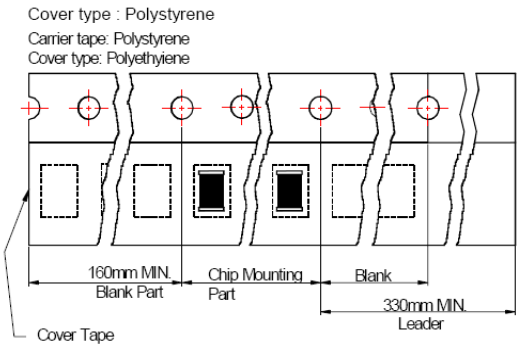
PACKAGING

REEL Dimensions (mm)



TAPE Material



Carrier Tape: Polystyrene (for 201209, 201212, 321611 series)
Paper (for 160808)

Tape Dimensions (mm)

Figure A

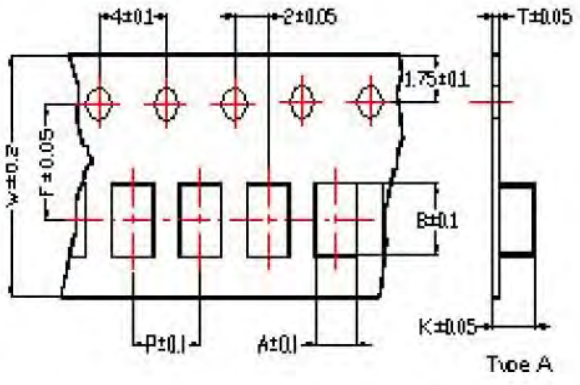
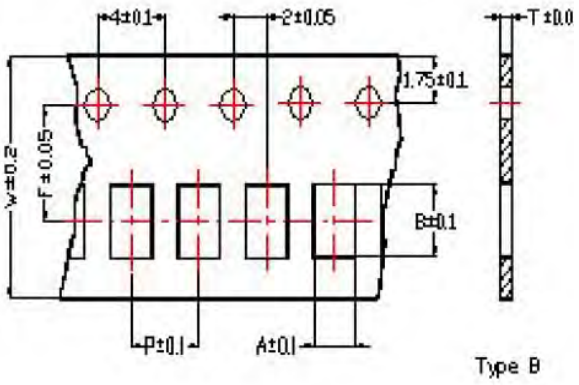


Figure B



TAPE DIMENSIONS AND PACKAGING QUANTITIES

TYPE	A	B	W	P	T	CHIPS / REEL
1012	1.3	1.55	8	4	0.22	4000
2012	1.42	2.24	8	4	0.22	3000