Data Sheet

Customer:	
Product:	**Multilayer Array Chip Common Mode Filter—CMA Series**
Sizes.:	**1206**
Issued Date:	**14-Apr-25**
Edition:	**REV.A2**

Pb RoHS Compliant

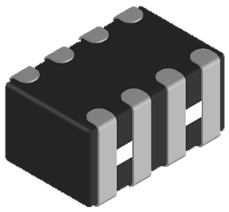
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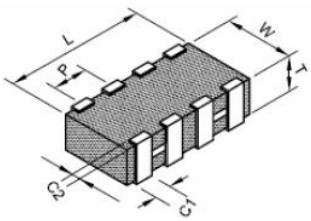
Multilayer Array Chip Common Mode Filter



■Features

– Powerful components with composite co-fired material to solve EMI problem for high speed differential signal transmission line as USB, and LVDS, without distortion to high speed signal transmission.

■Dimensions



Type	Sizes (Inch)	L (mm)	W (mm)	T (mm)	P (mm)	C1 (mm)	C2 (mm)
CMA06B	1206	3.20±0.20	1.60±0.20	1.00±0.10	0.80±0.10	0.45±0.15	0.30±0.20

■Part Numbering

CMA	06B	Y	T	900
Product Type	Dimensions LxW	Impedance Tolerance	Packaging Code	Impedance
	06B: 1206	Y: ±25%	T: Taping Reel	900: 90Ω 121: 120Ω 181: 80Ω

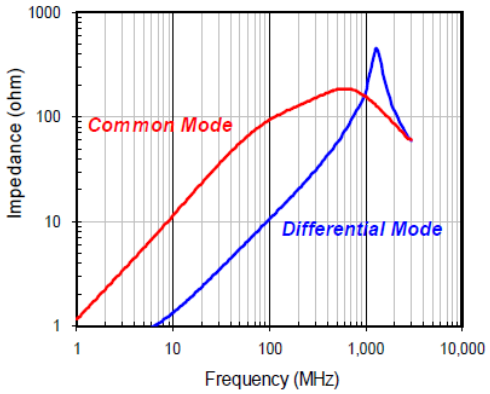
■Standard Electrical Specifications

CMA06B Type

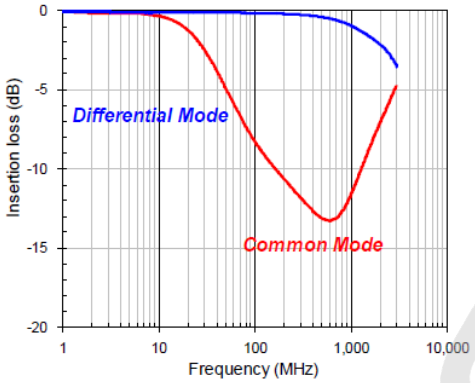
Part No.	Impedance (Ω)	Tolerance	Test Condition (MHz)	DCR (Ω) max.	Rated Current (mA) max.	Rated Voltage Vdc (V)	Withstanding Voltage (V)	Insulation Resistance (MΩ) min.
CMA06BYT900	90	±25%	100	0.40	400	10	25	200
CMA06BYT121	120	±25%	100	0.40	300	10	25	200
CMA06BYT181	180	±25%	100	0.50	300	10	25	200

Characteristics

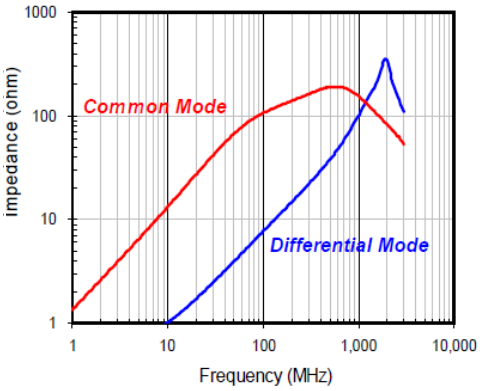
CMA06BYT900 Impedance vs. Frequency



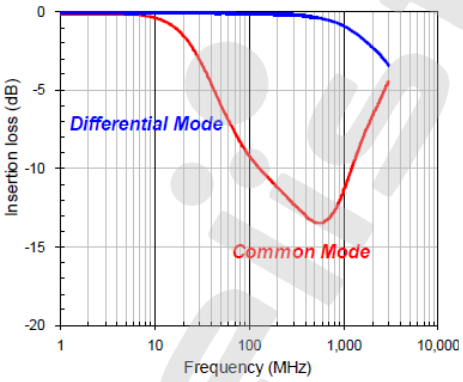
CMA06BYT900 Insertion Loss vs. Frequency



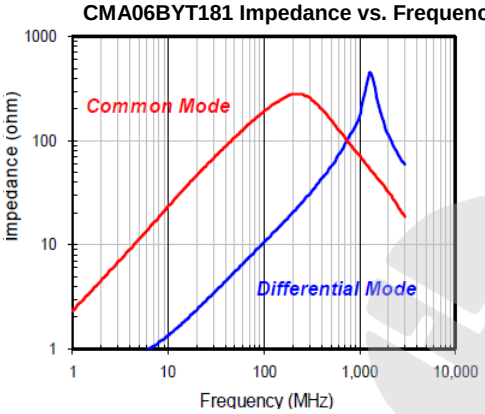
CMA06BYT121 Impedance vs. Frequency



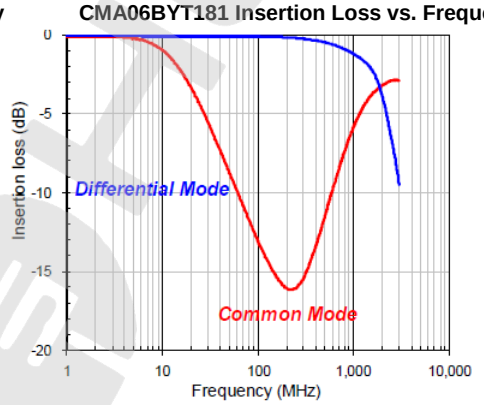
CMA06BYT121 Insertion Loss vs. Frequency



CMA06BYT181 Impedance vs. Frequency



CMA06BYT181 Insertion Loss vs. Frequency



■Environmental Characteristics

Electrical Performance Test

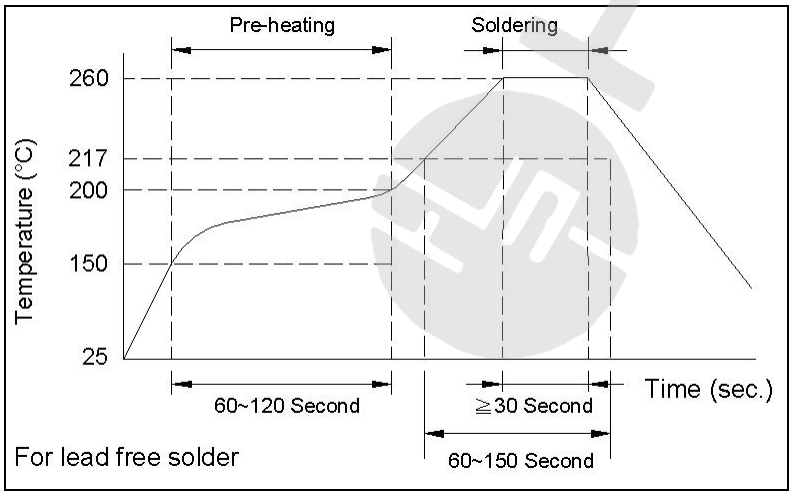
Items	Requirement	Test Conditions
Impedance	Refer to standard electrical characteristic spec.	Agilent E4991A RF Impedance / Material Analyzer
DCR		HP4338 Milliohmmeter

Mechanical Performance Test

Items	Requirement	Test Conditions
Temperature Cycle	No mechanical damage Impedance should be within ±20% of the initial value	Temperature: -40~ +85℃ Cycle : 100cycles Dwell time: 30minutes Measurement : at ambient temperature 24 hrs after test completion
Operational Life		Temperature: 85℃± 5℃ Test time: 1000hrs Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion
Biased Humidity		Temperature: 40±2℃ Humidity : 90~95% RH Test time: 1000hrs Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion
Resistance to Solder Heat	Impedance should be within ±20% of the initial value No mechanical damage More than 95 % of terminal electrode should be covered with new solder	Solder temperature: 260 ± 5℃ Flux: Rosin DIP time: 10 ±1 sec
Steam Aging Test	More than 95 % of terminal electrode should be covered with new solder	Temperature : 93 ± 2℃ Test time : 4 hrs Solder temperature : 235 ± 5℃ Flux : Rosin DIP time : 5 ± 1 sec

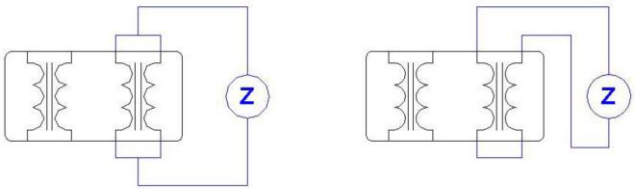
■Storage Temperature: <40°C; Humidity 70%RH
■Operating Temperature: -40~+85°C
■Shelf life: 1 years Max

■Recommended Soldering Conditions

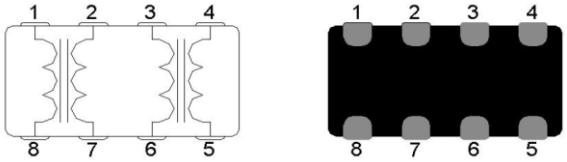


■Measuring Circuits

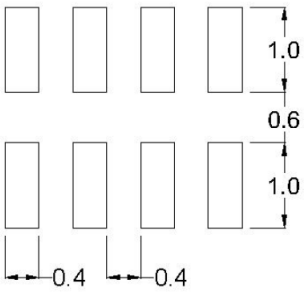
Common Mode **Differential Mode**



■Circuit Configuration

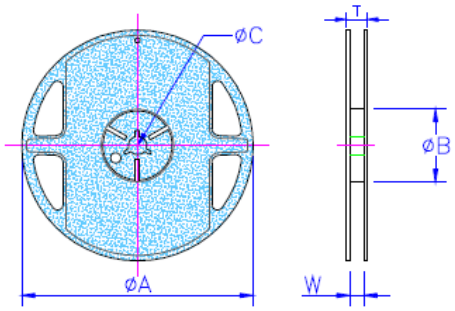


■Recommend Land Pattern unit: mm



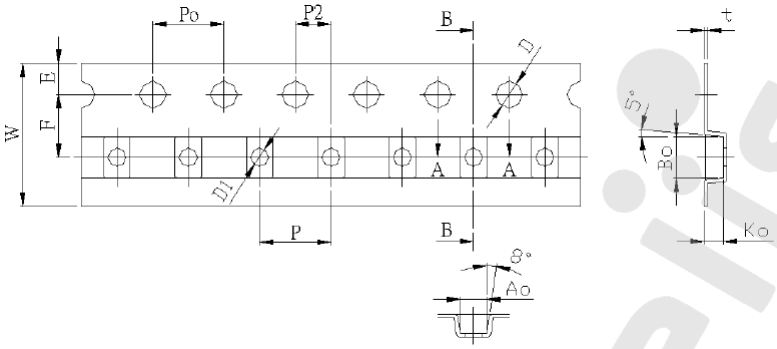
■Packaging

Packaging Quantity & Reel Specifications



Type	ØA (mm)	ØB (mm)	ØC (mm)	W (mm)	T (mm)	Quantity (EA)
CMA06B	178±1	60+0.5/-0	13.0±0.2	9.0±0.5	12.0±0.15	3000

Emboss Plastic Tape Specifications



Type	A0 (mm)	B0 (mm)	W (mm)	E (mm)	F (mm)	P (mm)	P0 (mm)	P2 (mm)	D (mm)	D1 (mm)	K0 (mm)	t (mm)
CMA06B	1.80±0.10	3.40±0.10	8.0±0.10	1.75±0.10	3.50±0.05	4.00±0.10	4.00±0.10	2.00±0.05	1.55±0.05	1.00±0.05	1.25±0.10	0.22±0.05

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version A2	Apr 14,2025		-Add Shelf life.