

Data Sheet

Customer:

Product: Chip Common Mode Filter-PCM series

Sizes.: 7060 / 9070

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Chip Common Mode Filter

■ Features

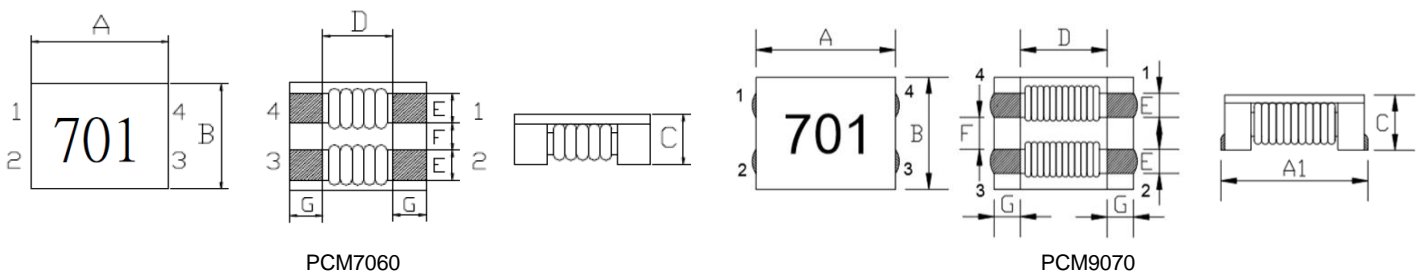
- Compatible with high-density portable devices, which are always being made smaller and lighter, because the height has been reduced.

■ Applications

- Power Line Noise Countermeasure For Various Electronic Equipment
- Noise Countermeasure For Adapter Lines And Battery Lines Or Larger Electronic Equipment Such As Note Book PCs And Word Processors



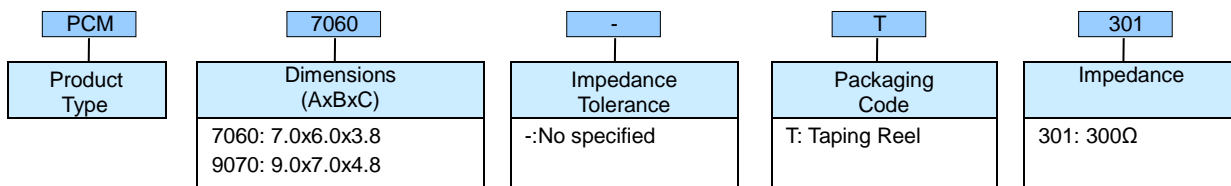
■ Dimensions



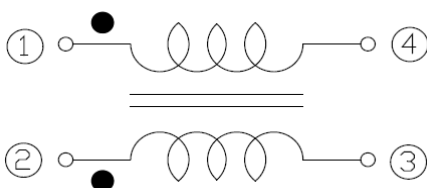
Unit : mm

Type	A	A1	B	C	D	E	F	G
PCM7060	7.00±0.50	-	6.00±0.20	3.80 max	3.50 typ	1.50±0.20	1.50±0.20	1.75±0.20
PCM9070	9.00±0.50	9.50±0.51	7.00±0.50	4.80 max	5.70 typ	1.50±0.20	2.00±0.20	1.70±0.20

■ Part Numbering



■ Equivalent Circuit



Chip Common Mode Filter

Electrical Specifications

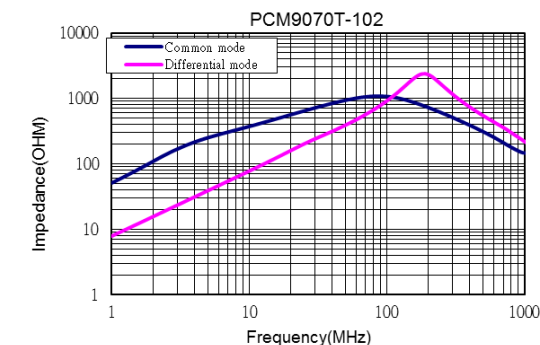
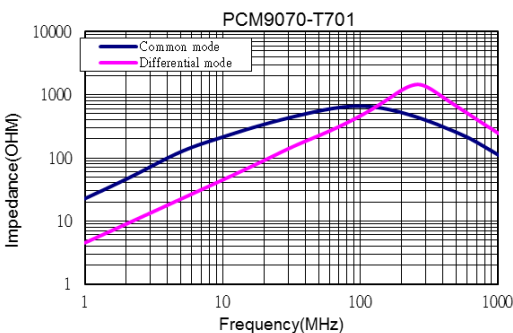
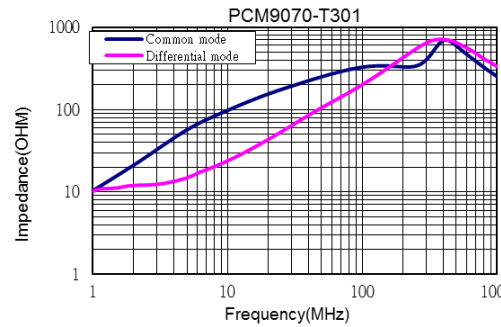
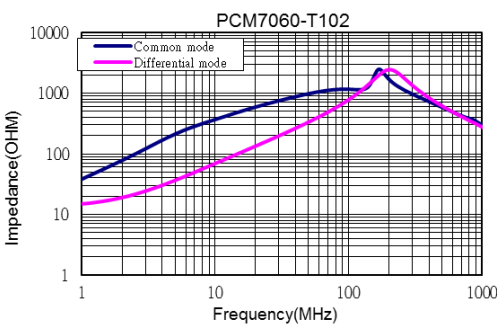
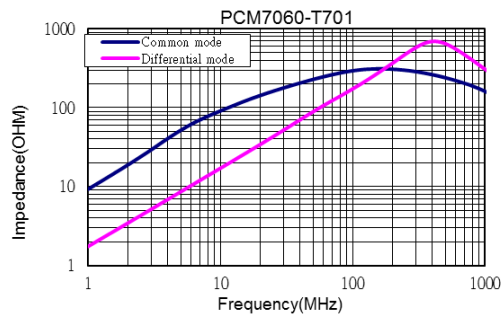
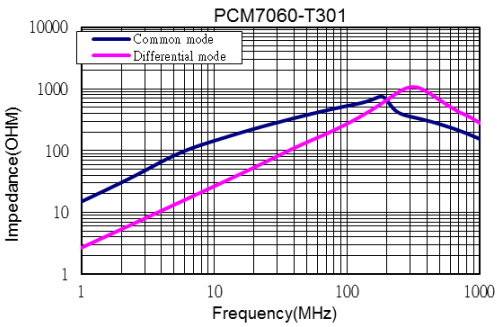
PCM7060 Type

Part No.	Impedance (Ω)		Test Condition (MHz)	DCR (mΩ) max.	IDC (A) max.	Rated Voltage Vdc (V)	Insulation Resistance (MΩ) min.
	min.	typ.					
PCM7060-T301	225	300	100	10	5	125	10
PCM7060-T701	500	700	100	15	4	125	10
PCM7060-T102	800	1020	100	17	3	125	10

PCM9070 Type

Part No.	Impedance (Ω)		Test Condition (MHz)	DCR (mΩ) max.	IDC (A) max.	Rated Voltage Vdc (V)	Insulation Resistance (MΩ) min.
	min.	typ.					
PCM9070-T301	225	300	100	6	6	80	10
PCM9070-T701	500	700	100	10	5	80	10
PCM9070-T102	750	1000	100	13	4	80	10

Characteristics



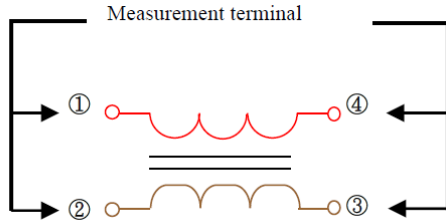
Chip Common Mode Filter

■ Test Equipment

Impedance / Inductance

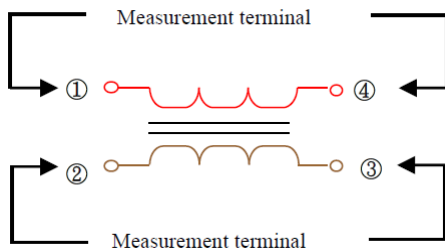
Measured by using Agilent E4991A RF Impedance Analyzer.

Measured by using Microtest 6377 LCR Meter.



DC Resistance

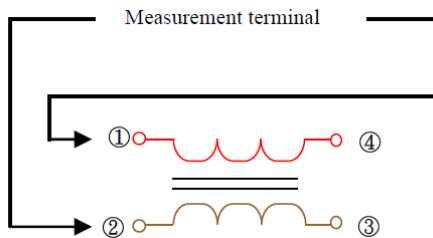
Measured by using Chroma 16502 mill ohm meter.



Insulation Resistance

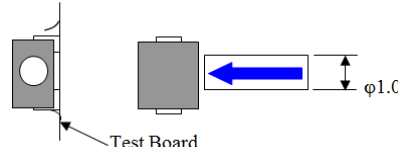
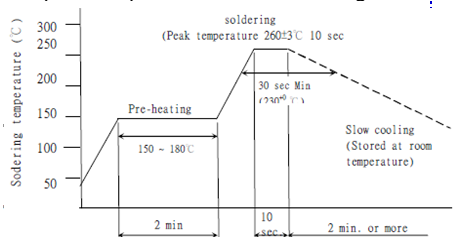
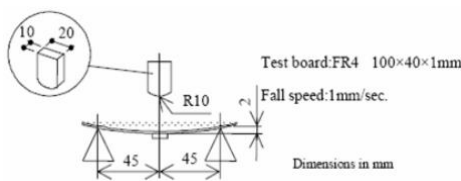
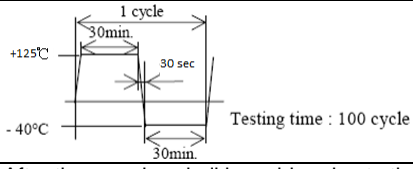
Measured by using Chroma 19073

Measurement voltage : 50v ,Measurement time : 60 sec



Chip Common Mode Filter

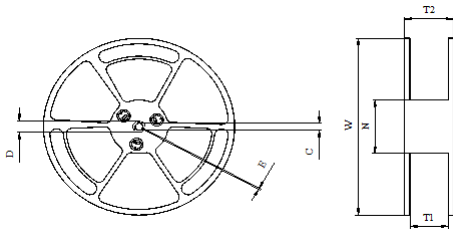
■ Environmental Characteristics

Items	Requirement	Test Conditions
Solderability	The product shall be connected to the test	Apply cream solder to the printed circuit board . circuit board by the fillet (the height is 0.2mm)
Terminal strength	The terminal electrode and the ferrite must not be damaged.	Solder a chip to test substrate , and then laterally apply a load 1.0Kg in the arrow direction. 
Resistance to Soldering heat (reflow soldering)	There shall be no damage or problems.	Temperature profile of reflow soldering  <p>The specimen shall be passed through the reflow oven with the condition shown in the above profile for 1 time. The specimen shall be stored at standard atmospheric eric conditions for 1 hour, after which the measurement shall be made.</p>
Strength on PC board bending	The terminal electrode and the ferrite must not be damaged.	Solder a chip to test substrate and then apply a load. 
Thermal shock		 <p>Testing time : 100 cycle</p>
High temperature resistance	Impedance:Within±20% of the initial value. Insulation resistance and DC resistance on the specification shall be met.	After the samples shall be soldered onto the test circuit board, the test shall be done. Measurement : After placing for 24 hours min. Temperature : +125±2°C Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours
Humidity resistance	The terminal electrode and the ferrite must not be damaged.	After the samples shall be soldered onto the test circuit board, the test shall be done. Measurement : After placing for 24 hours min. Temperature : +60±2°C , Humidity : 90 to 95 %RH Applied voltage : Rated voltage Applied current : Rated current Testing time : 500±12 hours
Low temperature storage		After the samples shall be soldered onto the test circuit board, the test shall be done. Measurement : After placing for 24 hours min. Temperature : -40±2°C Testing time : 500±12 hours
Vibration		After the samples shall be soldered onto the test circuit board, the test shall be done. Frequency : 10 to 55 Hz
Solderability(for PCM7060)	New solder more than 75%	Flux (rosin, isoprophl alcohol) shall be coated over the whole of the sample before hard, the sample shall then be preheated for about 2 minutes in a temperature of 130~150°C and after it has been immersed to a depth of 1.5mm below for 3±0.2 seconds fully in molten solder with a temperature of 245±2°C. More than 75% of the electrode sections shall be covered with new solder smoothly when the sample is taken out of the solder bath.

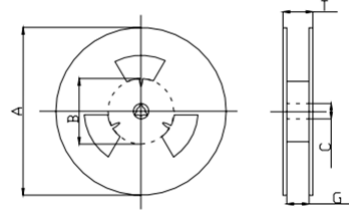
Chip Common Mode Filter

■Packaging

Packaging Quantity & Reel Specifications



PCM7060

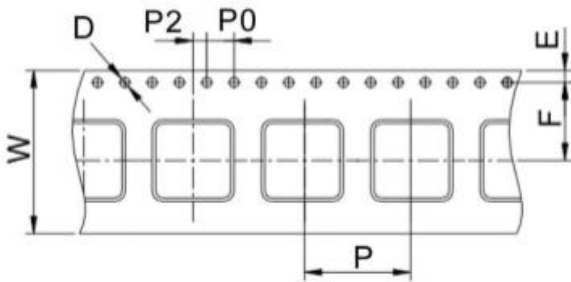


PCM9070

Unit: mm

Type	W	D	C	T1	N	T2	E	Quantity (EA)
PCM7060	330±1.5	21.5+0.5/-0	13+0.5/-0.2	12.5+0.5/-0	100±1.5	16.9±0.4	2.0±0.5	1500
PCM9070	330±1.5	21.5+0.5/-0	20.4+0.5/-0.2	24.5+0.5/-0	100±1.5	28.9±0.4	2.0±0.5	700

Embossed Plastic Tape Specifications



Unit: mm

Type	W	D	E	F	P	P0	P2
PCM7060	16±0.2	1.5	1.75±0.1	7.5±0.1	12	4±0.1	2±0.1
PCM9070	24±0.2	1.5	1.75±0.1	11.5±0.1	16	4±0.1	2.02±0.1