Low Profile Type(Chip Common Mode Filter) **Engineering Specification**

Features and Application

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

MIPI, MHL serial interface in mobile device

Part Numbering





- 8: Dimension T (ex : 05=0.50mm)
- 9: Packaging style P Embossed paper tape, 7"reel.

Product Detail

Part Number	Imp.Com. (Ω)±25% @100MHz	DCR Max. (Ω)	Rated Current Max. (mA)	Rated Voltage (V)	Insulation Resistance Min. (ΜΩ)
HCM1012GS500A05P	50	1.5	100	10	100
Test Instruments	 Agilent E4991A RF IMPEDANCE / MATERIAL ANALYZER HP4338 MILLIOHMMETER Agilent E5071C ENA SERIES NETWORK ANALYZER Keithley 2410 1100V SOURCE METER 				

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Typical Characteristics





Shares and Dimensions



Туре	Dimensions	
L	1.25±0.10	
W	1.00±0.10	
Т	0.50±0.10	
Р	0.50±0.10	
C1	0.30±0.10	
C2	0.20±0.15	
Unit : mm		

Circuit Configutation & Layout Pad





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Tape and Reel Specifications / Taping Dimensions

Type : Paper Carrier



Unit : mm				
	Symbol	Size	Symbol	Size
	А	1.20±0.05	P0	4.00±0.10
	В	1.45±0.05	P1	4.00±0.10
	W	8.00±0.10	P2	2.00±0.05
	E	1.75±0.05	D0	1.55±0.05
	F	3.50±0.05	Т	0.60±0.03

Reel Dimensions



STANDARD QUANTITY FOR PACKAGING

Packaging style : Taping Reel packaging quantity : 4000 pcs/reel Inner box : 5 reel/inner box

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Recommended Soldering Conditions



GENERAL TECHNICAL DATA

Opertation temperatur range : -40° C ~ $+85^{\circ}$ C Storage Condition : Less than 40° C and 70% RH Storage Time: 6 months Max. Soldering method: Reflow or Wave Soldering

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Reliability and Test Condition

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



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