

PULSE-GUARD® ESD Suppressor

Common Mode Noise Filter > LPF Series

HF RoHS Pb



Additional Information



Resources



Accessories



Samples

Description

Littelfuse LPF Series is a common mode noise filter that covers the specification of the requirements for high-speed differential serial interfaces, corresponding to new high-speed data transmission specification, like C-PHY.

Features

- Effective for suppressing common mode noise and almost no effect for high-speed differential data line
- Ultra-small size as low as 0.90 X 0.68 X 0.45 mm
- Ceramic based SMD component
- Non-polarized product
- Conforming to RoHS directive

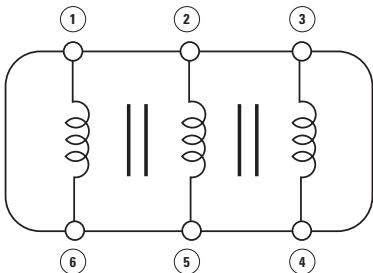
Benefits

- Ultra-small size
- High voltage

Application

- Mobile phone and tablet
- Portable/wearable devices
- Other consumer devices

Functional Block Diagram



Electrical Specifications

Part Number	Common Mode Impedance (Ω) @ 100 Mhz	Max DC Resistance (Ω) ¹	Minimum Insulation Resistance ($M\Omega$) @ 5 V	Max Rated Current (mA) ¹
LPF090703A250TG	25 (+/-25%)	5	10	80
LPF090703A350TG	35 (+/-25%)	8	10	70

Note:

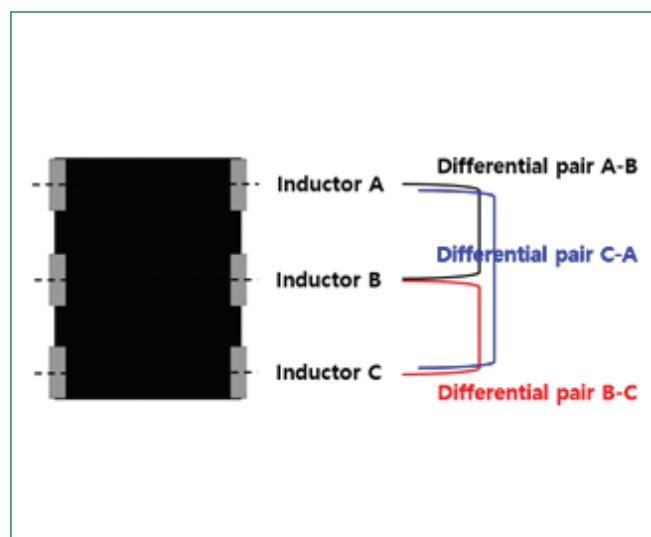
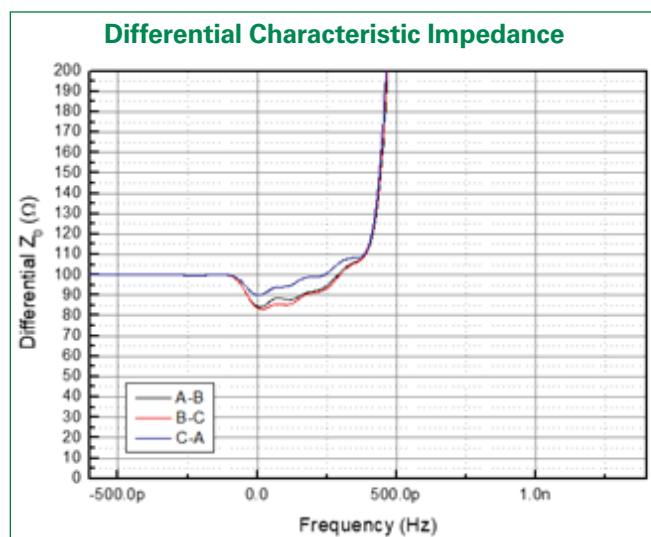
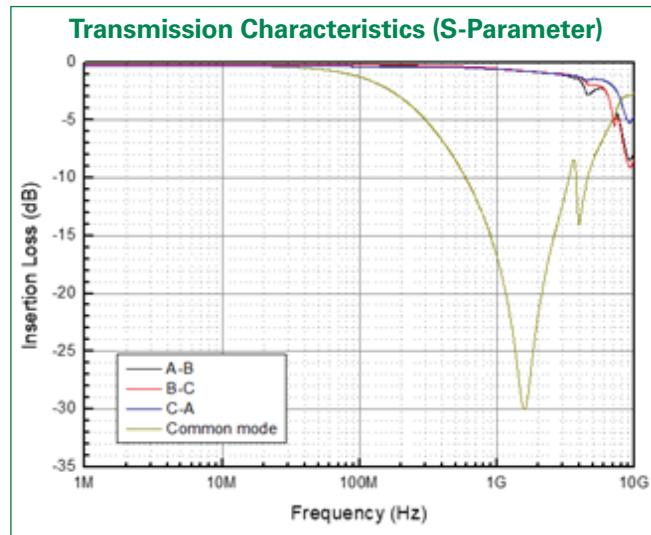
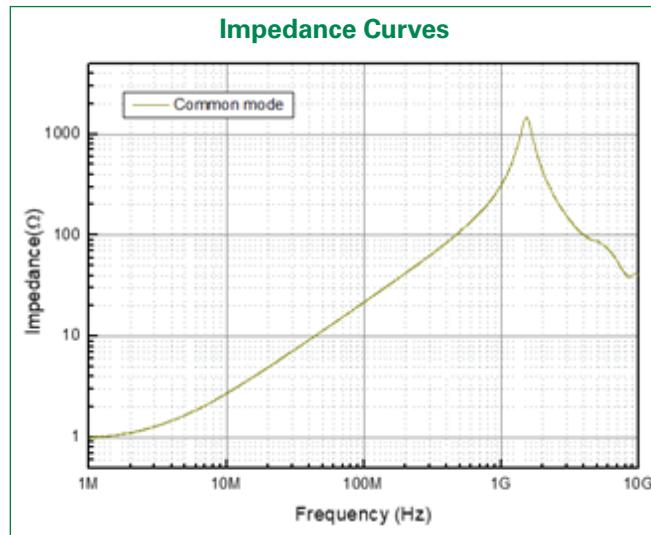
1. Test condition 25 °C±2 °C
Operating Temperature: -40 °C ~ 85 °C

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Frequency Response

LPF090703A250TG

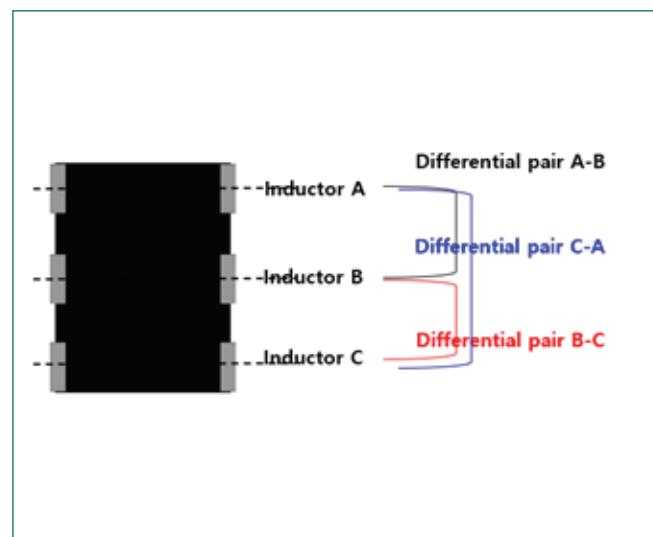
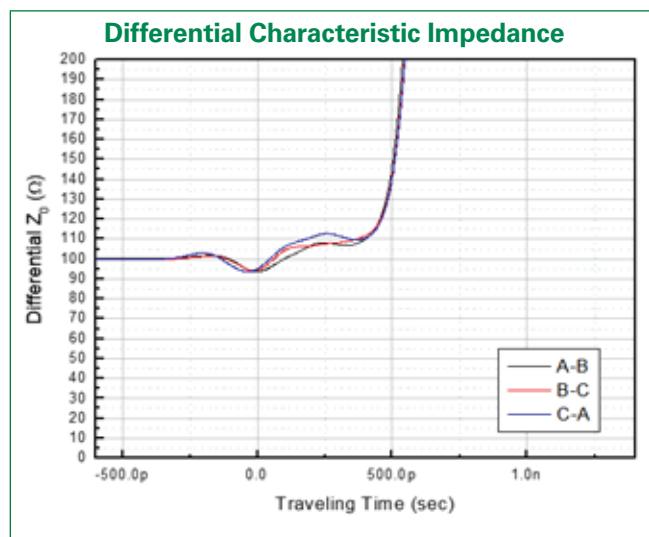
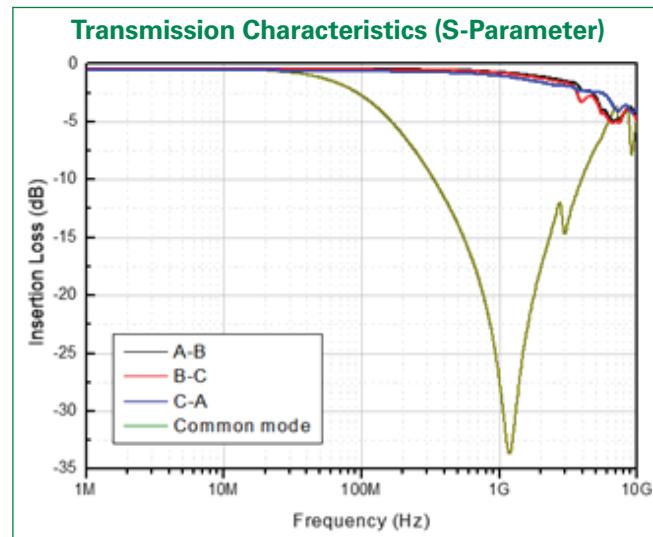
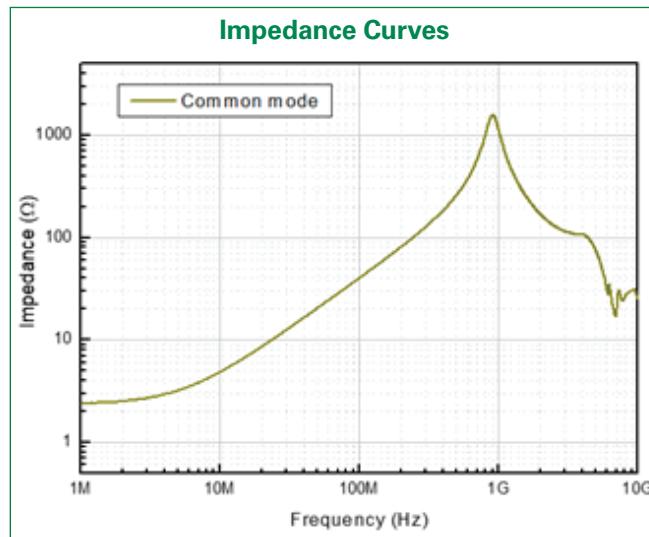


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LPF090703A350TG

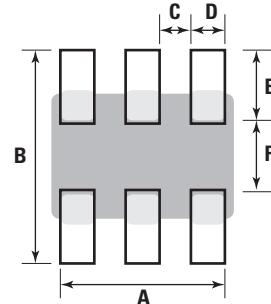
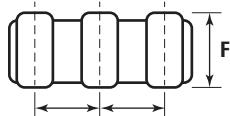
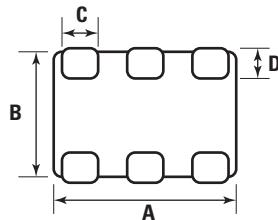


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Dimension and Recommended Footprint

All dimensions in mm



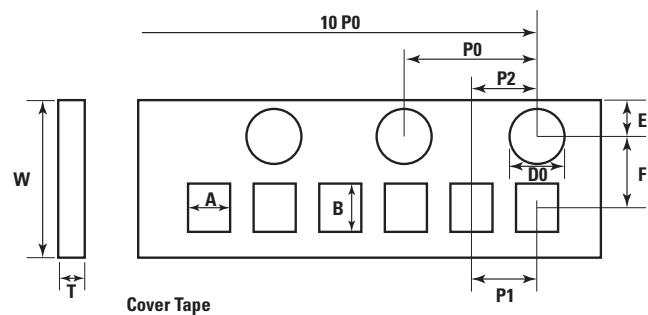
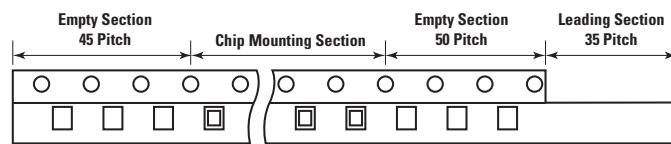
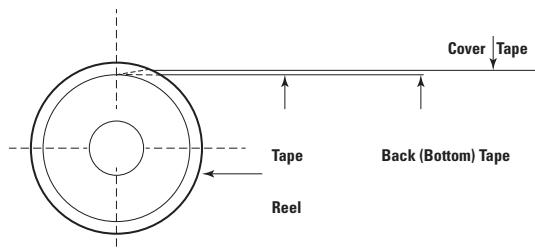
A	B	C	D	E	F
0.90	0.68	0.18	0.13	0.35	0.45

Tolerance +/- 0.05 mm

A	B	C	D	E	F
0.85	0.99	0.20	0.15	0.33	0.33

Tolerance +/- 0.05 mm

Tape and Reel Information



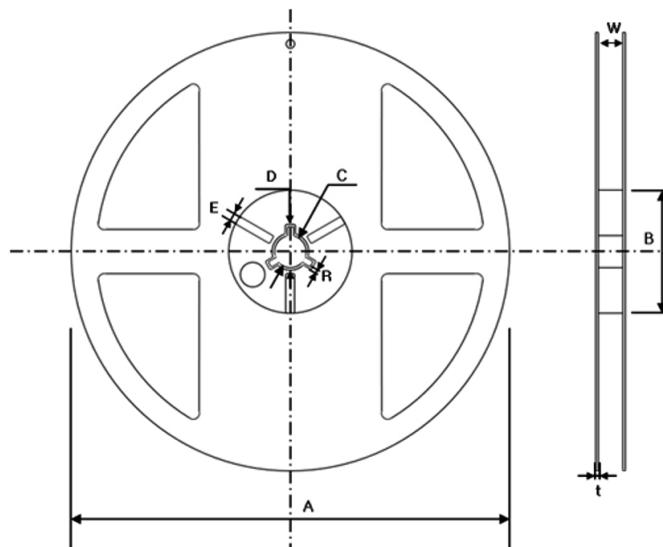
Unit = mm

Symbol	A	B	E	F	D0	P1	P2	P0	10P0	W	T
Dimension	0.81	1.12	1.75	3.50	1.55	2.00	2.00	4.00	40.00	8.00	0.58
Tolerance	± 0.03	± 0.03	± 0.05	± 0.05	± 0.03	± 0.05	± 0.05	± 0.05	± 0.10	± 0.10	± 0.04

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Recommended Land Pattern



1. Reel Materials : Polystyrene
2. Label
3. Taping
 - Standard Packing Quantity per Reel ($\phi 178$)
 - Paper Tape: 10,000 pcs/reel

Unit = mm

Code	A	B	C	D	E	W	t	R
Dimension	$\phi 178 \pm 2$	Min. $\phi 50$	$\phi 13 \pm 0.5$	$\phi 20 \pm 0.8$	$\phi 3.0 \pm 0.5$	10 ± 1.5	1.3 ± 0.2	1.0 ± 0.2

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