Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: 2012 0.8G&2.0GHz Low Pass Filter

PART NUMBER: LPF2012LM59RWPENA

Features:

- Compact size : 2.00x1.25x0.90mm
- RoHS compliant

Applications:

- WWAN, Penta-Band

ELECTRICAL SPECIFICATIONS

DESCRIPTION	Value
Pass Band	800~2025 MHz
Impedance	50Ω
Insertion Loss	0.37 dB typ. ,0.5 dB(Max) at 800-1000 MHz(-40~85°C) 0.70 dB typ. ,0.8 dB(Max) at 1700-1910 MHz(-40~85°C) 1.30 dB typ. ,1.5 dB(Max) at 2010-2025 MHz(-40~85°C)
V.S.W.R	2.0(Max)
Attenuation	20dB Min @ 2.3~3.7GHz 30dB Min @ 3.7~4.1GHz 20dB Min @ 4.1~6.1GHz 10dB Min @ 6.1~8.1GHz
Operating Temperature	-40 ~ 85℃

RoHS COMPLIANT

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Tel: 86 512 6807 9998

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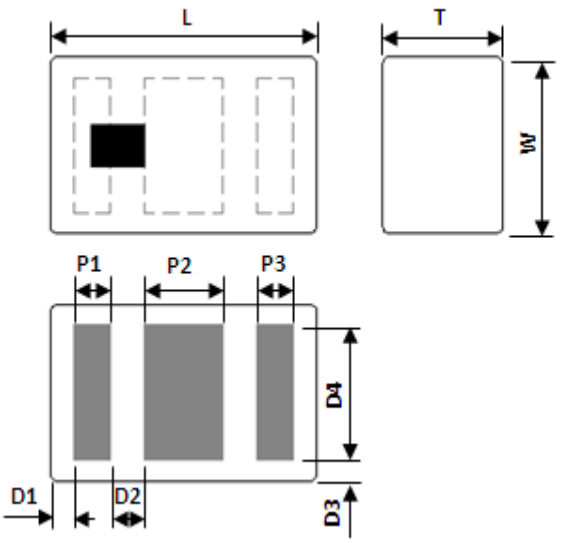
MECHANICAL DIMENSION

Outline



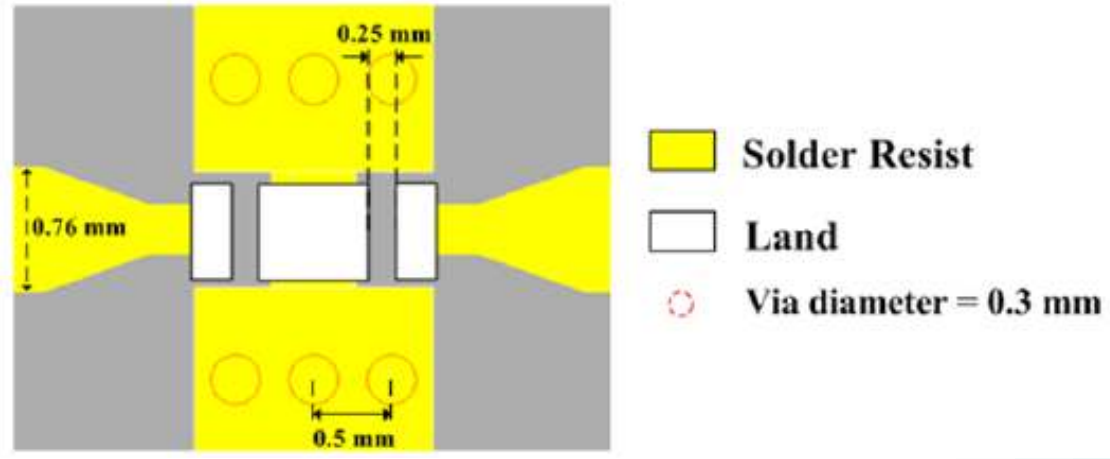
Termination

Terminal name	function
P1	Input
P2	GND
P3	Output

Mechanical

	Dimension
L (mm)	2.00 ±0.15
W (mm)	1.25 ±0.10
T (mm)	0.90 ±0.10
P1 (mm)	0.28 ±0.10
P2 (mm)	0.60±0.10
P3 (mm)	0.28±0.10
D1 (mm)	0.17±0.10
D2 (mm)	0.25±0.10
D3 (mm)	0.15±0.10
D4 (mm)	0.95 ±0.10

Reference design of EVB



Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

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ELECTRICAL PERFORMANCES

- Measured on Agilent E5071C Network Analyzer
- Input port : Port 1 (Return loss : S11)
- Output port : Port 3 (Return loss : S33)
- Insertion loss : S31

Ch1	Tr1	S31	>1	1.0000000	GHz	-0.4340	dB	Ch1	Tr2	S11	1	800.00000	MHz	-10.995	dB
Ch1	Tr1	S31	2	1.7000000	GHz	-0.3525	dB	Ch1	Tr2	S11	2	1.0000000	GHz	-10.983	dB
Ch1	Tr1	S31	3	1.9100000	GHz	-0.6951	dB	Ch1	Tr2	S11	3	1.7000000	GHz	-17.438	dB
Ch1	Tr1	S31	4	2.0100000	GHz	-0.9492	dB	Ch1	Tr2	S11	4	1.9100000	GHz	-13.713	dB
Ch1	Tr1	S31	5	2.0250000	GHz	-1.0901	dB	Ch1	Tr2	S11	5	2.0100000	GHz	-22.260	dB
Ch1	Tr1	S31	6	2.3000000	GHz	-26.036	dB	Ch1	Tr2	S11	6	2.0250000	GHz	-19.476	dB
Ch1	Tr1	S31	7	3.4000000	GHz	-39.036	dB								
Ch1	Tr1	S31	8	3.8200000	GHz	-35.848	dB								
Ch1	Tr1	S31	9	6.1000000	GHz	-28.447	dB								

Frequency Characteristics

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REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 06, 2020	- New issue

RoHS COMPLIANT