

Description: 1608 LTE Coupler

PART NUMBER: CPL1608LL12RWHEXA

Features:

- Compact size : 1.60x0.80x0.60mm
- RoHS compliant

Applications:

- WWAN Hexa-band
- LTE (0.6-2.7GHz)

ELECTRICAL SPECIFICATIONS

DESCRIPTION	Value		
Pass Band	698-960 MHz	1425-2170 MHz	2300-2700 MHz
Insertion Loss (dB)	0.15 (Max.) at 25°C	0.25 (Max.) at 25°C	0.3 (Max.) at 25°C
V.S.W.R	1.5 (Max)		
Coupling (dB)	23 ~ 28	21.5 ~ 26.5	22.5 ~ 27.5
Isolation (dB)	42 min.	38 min.	35 min.
Operating Temperature	-40 ~ +85°C		

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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For more information:

Pulse Worldwide Headquarters
 15255 Innovation Drive #100
 San Diego, CA 92128
 USA
 Tel: 1-858-674-8100

Pulse/Larsen Antennas
 18110 SE 34th St Bldg 2 Suite 250
 Vancouver, WA 98683
 USA
 Tel: 1-360-944-7551

Europe Headquarters
 Pulse GmbH & Co, KG
 Zeppelinstrasse 15
 Herrenberg, Germany
 Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
 99 Huo Ju Road(#29 Bldg, 4th Phase
 Suzhou New District
 Jiangsu Province, Suzhou 215009 PR China
 Tel: 86 512 6807 9998

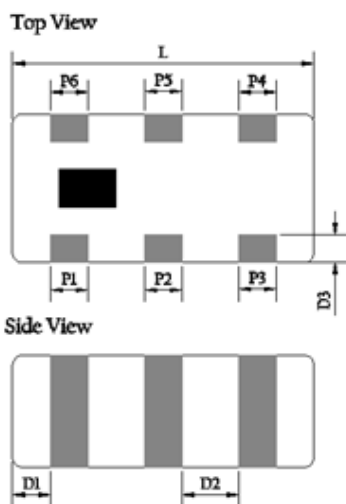


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MECHANICAL DIMENSION

Outline



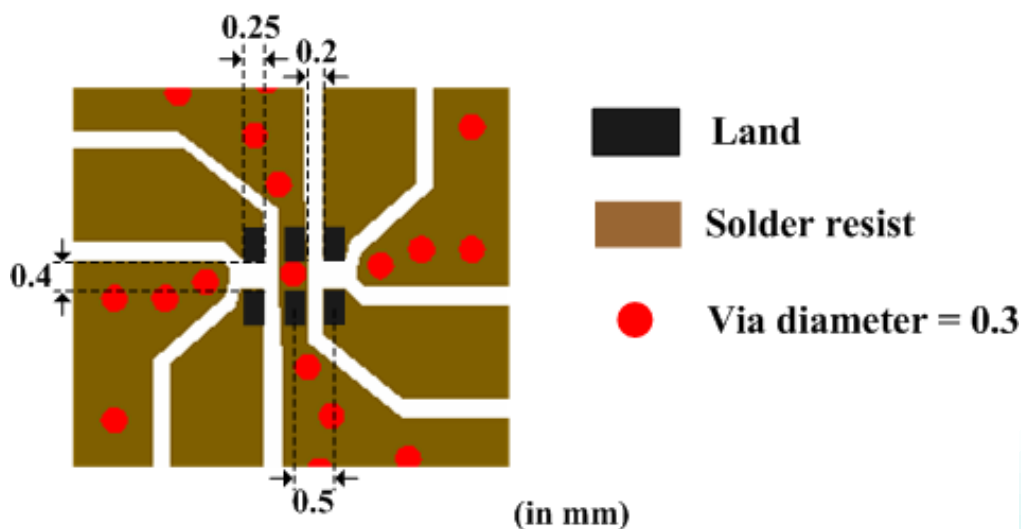
Termination

Terminal name	function
P1	Input
P2	GND
P3	Output
P4	50-Ω Term
P5	GND
P6	Coupling

Mechanical

	Dimension
L (mm)	1.60 ± 0.15
W (mm)	0.80 ± 0.15
T (mm)	0.60 ± 0.15
P1 (mm)	0.20 ± 0.15
P2 (mm)	0.20 ± 0.15
P3 (mm)	0.20 ± 0.15
P4 (mm)	0.20 ± 0.15
P5 (mm)	0.20 ± 0.15
P6 (mm)	0.20 ± 0.15
D1 (mm)	0.20 ± 0.15
D2 (mm)	0.30 ± 0.10
D3 (mm)	0.15 ± 0.10

Reference design of EVB



•Line width should be designed to match 50Ω characteristic impedance, depending on PCB

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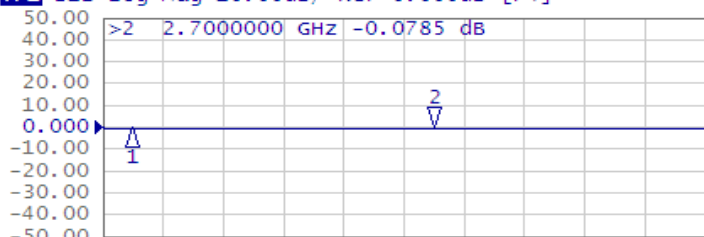
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ELECTRICAL PERFORMANCES

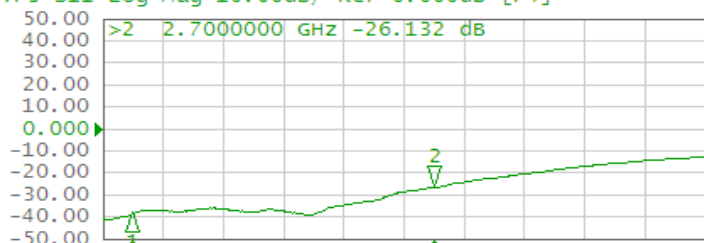
E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

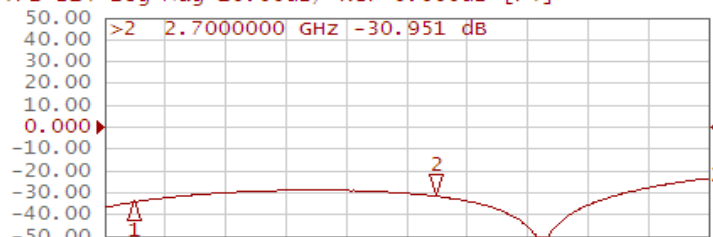
Tr1 S12 Log Mag 10.00dB/ Ref 0.000dB [F4]



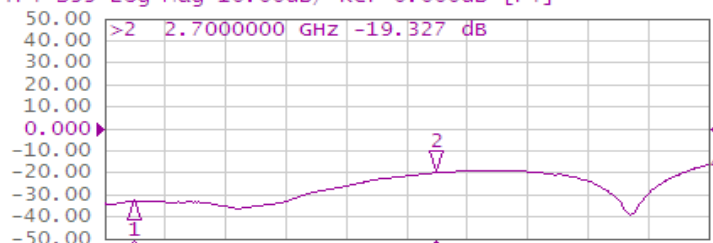
Tr3 S11 Log Mag 10.00dB/ Ref 0.000dB [F4]



Tr2 S14 Log Mag 10.00dB/ Ref 0.000dB [F4]



Tr4 S33 Log Mag 10.00dB/ Ref 0.000dB [F4]



Ch1	Tr1	S12	1	700.00000	MHZ	-0.0497	dB
Ch1	Tr1	S12	>2	2.7000000	GHZ	-0.0785	dB
Ch1	Tr2	S14	1	700.00000	MHZ	-33.458	dB
Ch1	Tr2	S14	2	2.7000000	GHZ	-30.951	dB
Ch1	Tr3	S11	1	700.00000	MHZ	-38.057	dB
Ch1	Tr3	S11	2	2.7000000	GHZ	-26.132	dB
Ch1	Tr4	S33	1	700.00000	MHZ	-32.191	dB
Ch1	Tr4	S33	2	2.7000000	GHZ	-19.327	dB

- Measured on Agilent E5071C Network Analyzer
- Input port: Port 1 (Return loss: S11)
- Output port: Port 2 (Insertion loss: S21)
- Coupling port: Port 4 (Coupling: S41)
- 50 ohm terminal port: Port 3 (Isolation: S31)

Frequency Characteristics

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REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 18, 2020	- New issue

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