

**Description: 1608 LTE Coupler**

**PART NUMBER: CPL1608LL11RWHEXA**

**Features:**

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

**Applications:**

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

**ELECTRICAL SPECIFICATIONS**

DESCRIPTION	Value
Pass Band	578-2700 MHz
Insertion Loss (dB)	0.15 (Max.) at 25°C
V.S.W.R	1.5 (Max)
Coupling (dB)	30 ~ 39
Operating Temperature	-40 ~ +85°C

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

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 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

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

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

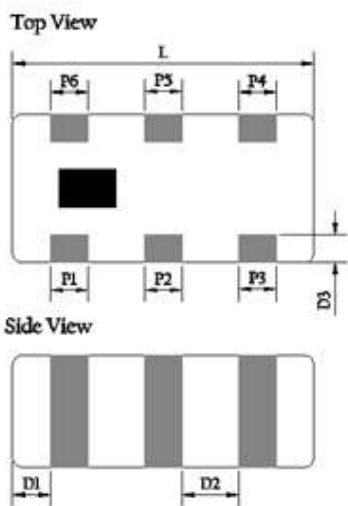


Description: 1608 LTE Coupler

PART NUMBER: CPL1608LL11RWHEXA

**MECHANICAL DIMENSION**

Outline



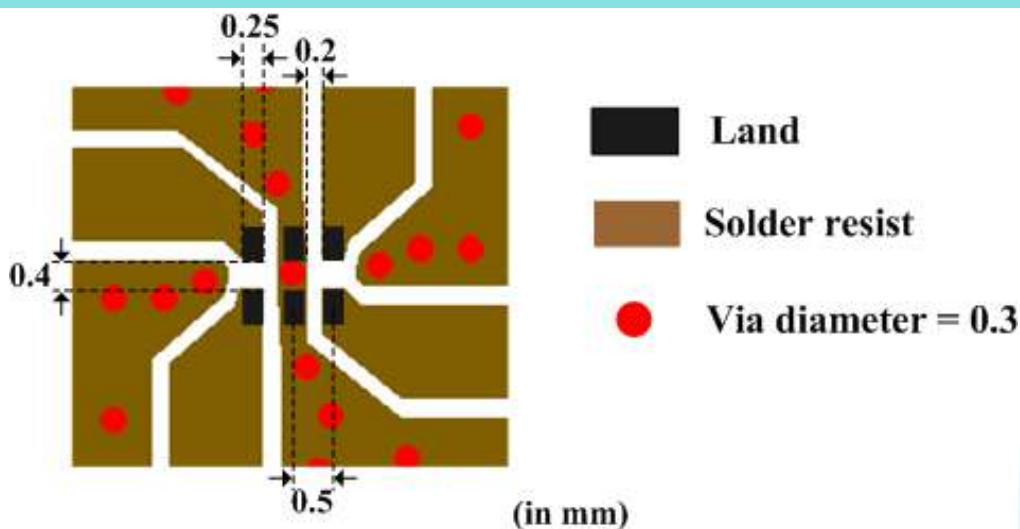
Termination

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

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**

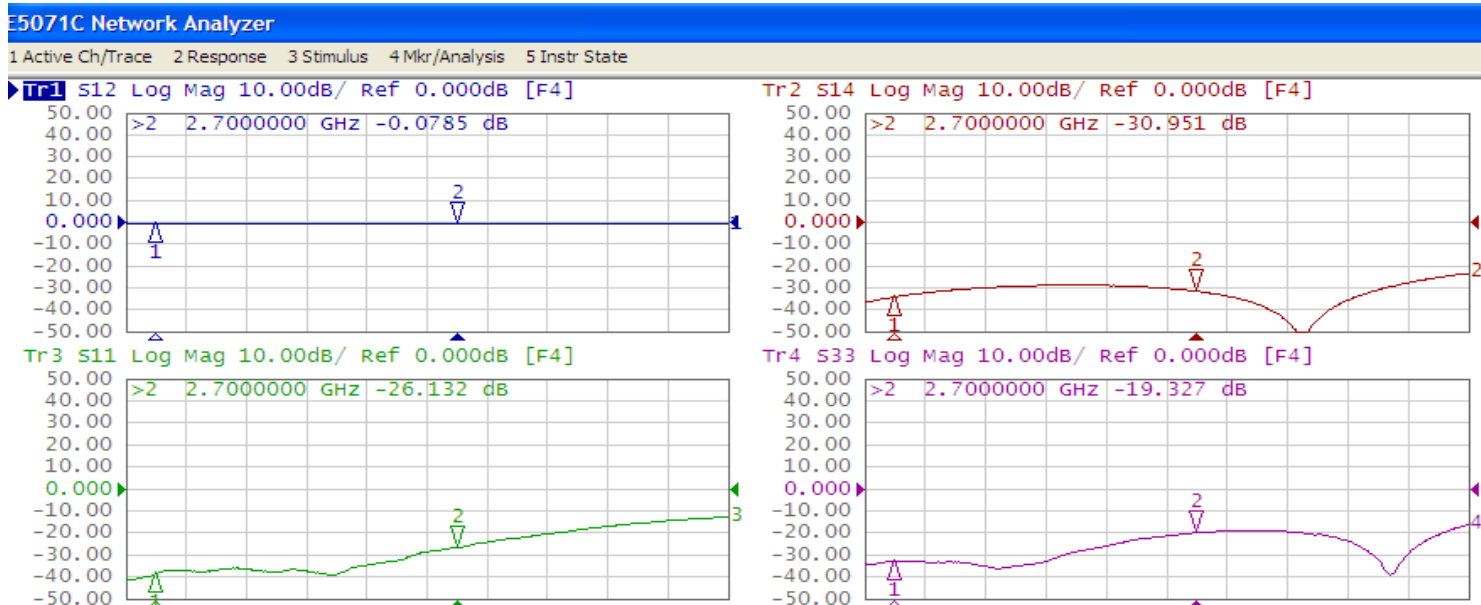


•Line width should be designed to match 50Ω characteristic impedance, depending on PCB

**Description: 1608 LTE Coupler**

**PART NUMBER: CPL1608LL11RWHEXA**

**ELECTRICAL PERFORMANCES**



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

**Description: 1608 LTE Coupler**

**PART NUMBER: CPL1608LL11RWHEXA**

### REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 30, 2020	- New issue