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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

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℃		

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:

RoHS COMPLIANT

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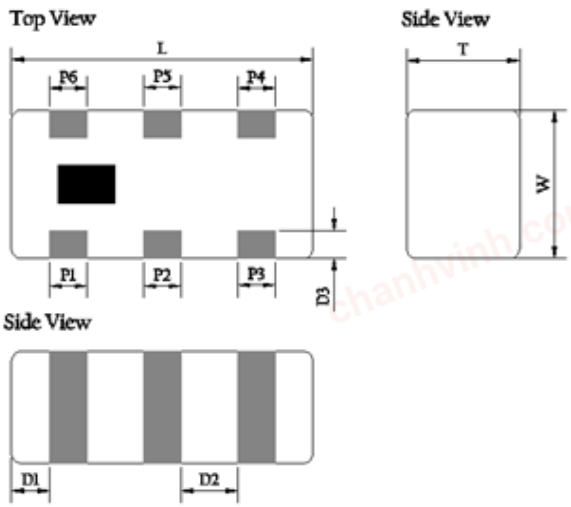
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MECHANICAL DIMENSION

Outline



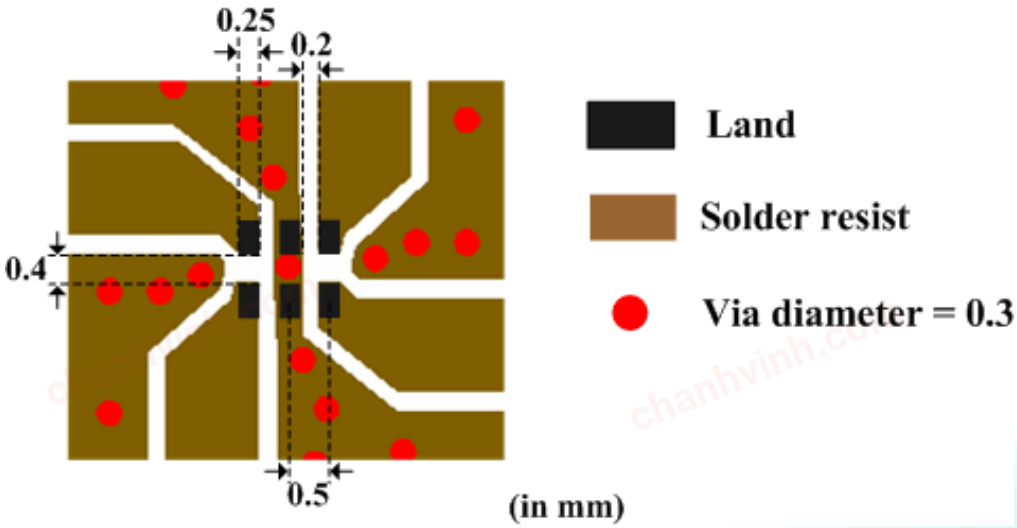
Termination

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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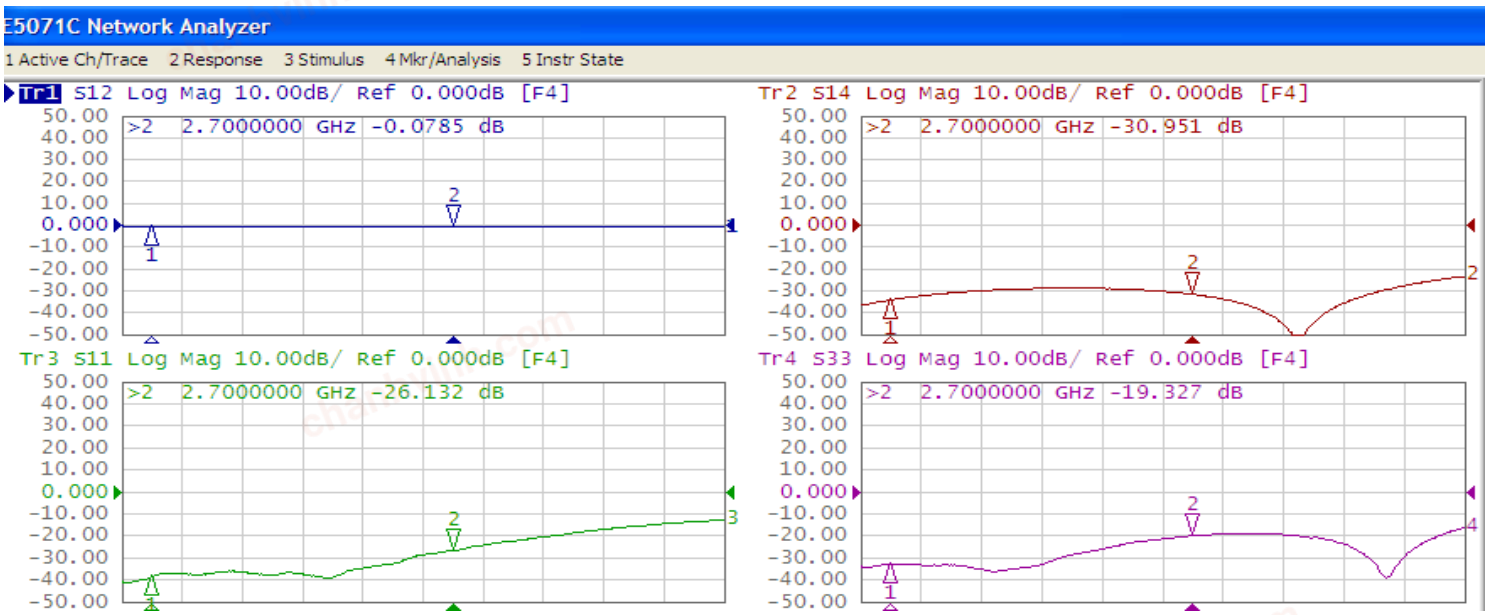
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ELECTRICAL PERFORMANCES



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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