

Description: 1608 LTE Coupler

PART NUMBER: CPL1608LL09RWHEXA

Features:

Compact size: 1.60x0.80x0.70mm

· RoHS compliant

Applications:

WWAN Hexa-band

• LTE (0.7-2.7GHz)

ELECTRICAL SPECIFICATIONS

DESCRIPTION	Value								
Pass Band	689.5-960.5 MHz 1700-2100 MHz 2300-2700 MHz								
Insertion Loss (dB)	0.25 (Max.) at 25°C								
V.S.W.R	1.4 (Max)								
Coupling (dB)	23 ~ 28								
Isolation (dB)	37 min. 35 min. 32 min.								
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



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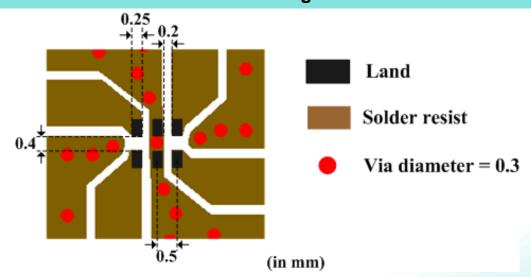
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MECHANICAL DIMENSION

<u>Outline</u>			<u>Termination</u>		<u>Mechanical</u>				
	L		.	T		Terminal name	function		Dimension
P3	P2	P1						L (mm)	1.60±0.15
	•			1		P1	Input	W (mm)	0.80 ± 0.15
					w	P2	GND	T (mm)	0.70±0.15
					**	P3	Coupling	P1 (mm)	0.20±0.15
			_D3			P4	50-Ω Term	P2 (mm)	0.20±0.15
P4	P5	P6				P5	GND	P3 (mm)	0.20±0.15
						P6	Output	P4 (mm)	0.20±0.15
						го	Odiput	P5 (mm)	0.20±0.15
								P6 (mm)	0.20±0.15
→		-						D1 (mm)	0.20±0.15
D 1	D	2						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

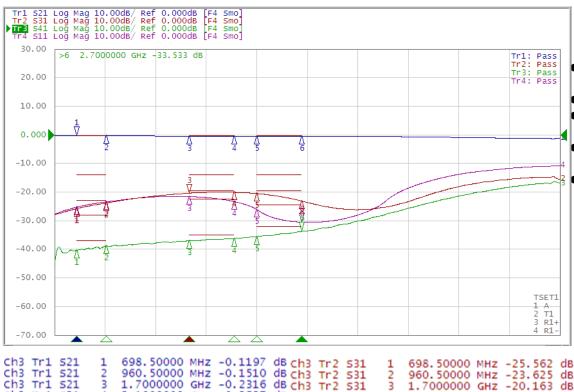




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ELECTRICAL PERFORMANCES



- 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)

Ch3	Tr1 Tr1 Tr1	521	1 2 3	698.50000 960.50000 1.7000000	MHZ	-0.1510	dB Ch3	Tr2	531	1 2 3	698.50000 960.50000 1.7000000	MHZ	-23.625	dB
Ch3	Tr1	521	4	2.1000000	GHZ	-0.2537	dB ch3	Tr2	531	4	2.1000000	GHZ	-19.869	dB
Ch3	Tr1	521		2.3000000						5	2.3000000			
Ch3	Tr1	521	6	2.7000000	GHZ	-0.2593	dB Ch3	Tr2	531	6	2.7000000	GHZ	-22.937	dB
ch3	Tr3	541	1	698.50000	MHZ	-40.107	dB Ch3	Tr4	511	1	698.50000	MHZ	-25.030	dB
ch3	Tr3	541	2	960.50000	MHZ	-38.596	dB Ch3	Tr4	511	2	960.50000			
Ch3	Tr3	541		1.7000000						3	1.7000000			
	Tr3			2.1000000						4	2.1000000			
Ch3	Tr3	541		2.3000000							2.3000000			
ch3	Tr3	S41	>6	2.7000000	GHZ	-33.533	dB Ch3	Tr4	511	6	2.7000000	GHZ	-30.285	dB

Frequency Characteristics





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REV	ISION	HIST	ORY
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RevisionDateDescriptionVersion 1Oct. 30, 2020- New issue