

2.4&6GHz 1608 Diplexer: LDP1608R2460L203

Applications:

WLAN (WiFi 6E/WiFi7)

Features

SMD, high reliability, Low loss...

Part number

<u>LDP</u>	<u>1608</u>	<u>R</u>	<u>2460</u>	<u>L2</u>	<u>03</u>
(1)	(2)	(3)	(4)	(5)	(6)

(1) Product Code	LTCC-DPX
(2) Size Code	1.6x0.8mm
(3) Packing	Tape and reel
(4) Frequency	2.4&6GHz
(5) Series	L2
(6) Type	03

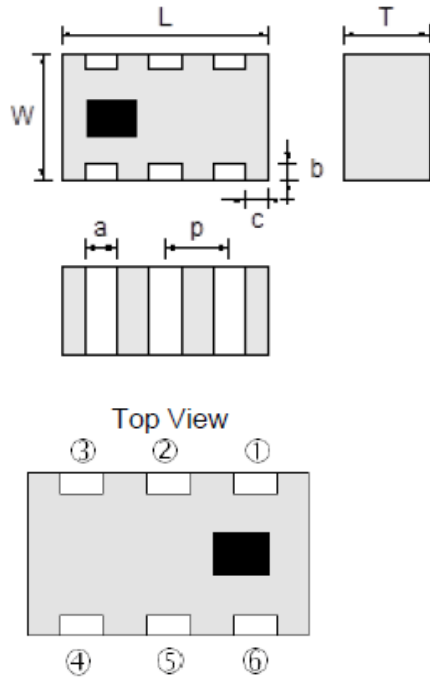
Electrical Specification

DESCRIPTION	VALUE	
Frequency Range	Low Band	High Band
	2400~2500MHz	4900~7125MHz
Insertion Loss	0.85dB max. @ 25°C 1.05dB max. @ -40~85°C	1.05dB max. @ 25°C 1.30dB max. @ -40~85°C
VSWR	1.8 max.	2.0 max.
Attenuation	9dB min. @100~1000 MHz 30dB min. @4800~7125 MHz 30dB min. @7200~7500 MHz 20dB min. @7500~12500MHz	35dB min. @100~1000 MHz 30dB min. @1000~2400 MHz 38dB min. @2400~2500 MHz 10dB min. @2500~3500 MHz 22dB min. @10340~14250 MHz 27dB min. @15510~17625 MHz 22dB min. @17625~21375 MHz
Isolation	38dB min. @4800~7125 MHz	25dB min. @2400~2500 MHz
Common	13dB min. @ 2400~2500MHz	11dB min. @4800~7125 MHz

The specification is defined on EVB.

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Dimension and Terminal Configuration



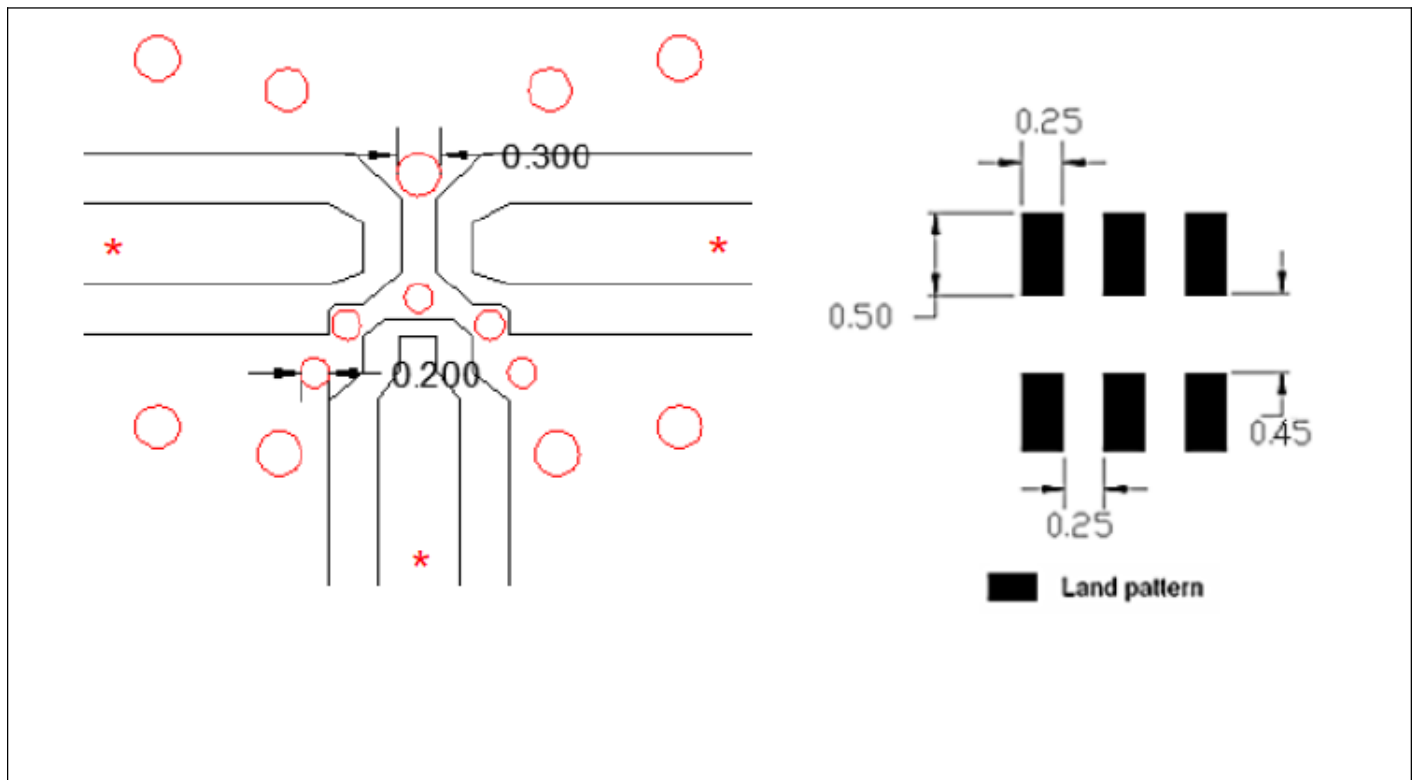
Dimension (mm)	
L (mm)	2.00±0.15
W (mm)	1.25±0.15
T (mm)	0.50±0.15
P1 (mm)	0.40±0.15
P2 (mm)	0.40±0.15
P3 (mm)	0.40±0.15
P4 (mm)	0.40±0.15
P5 (mm)	0.40±0.15
P6 (mm)	0.40±0.15
D1 (mm)	0.20±0.15
D2 (mm)	0.20±0.15
D3 (mm)	0.20±0.15

No.	Terminal Name
1	High band
2	GND
3	Low band
4	GND
5	Common
6	GND

P.S : Symmetrical,

No direction

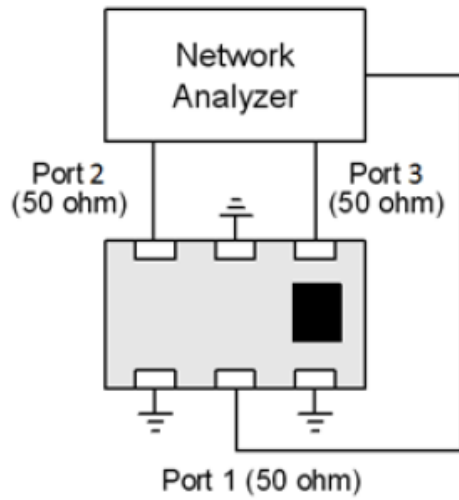
Evaluation Board Reference



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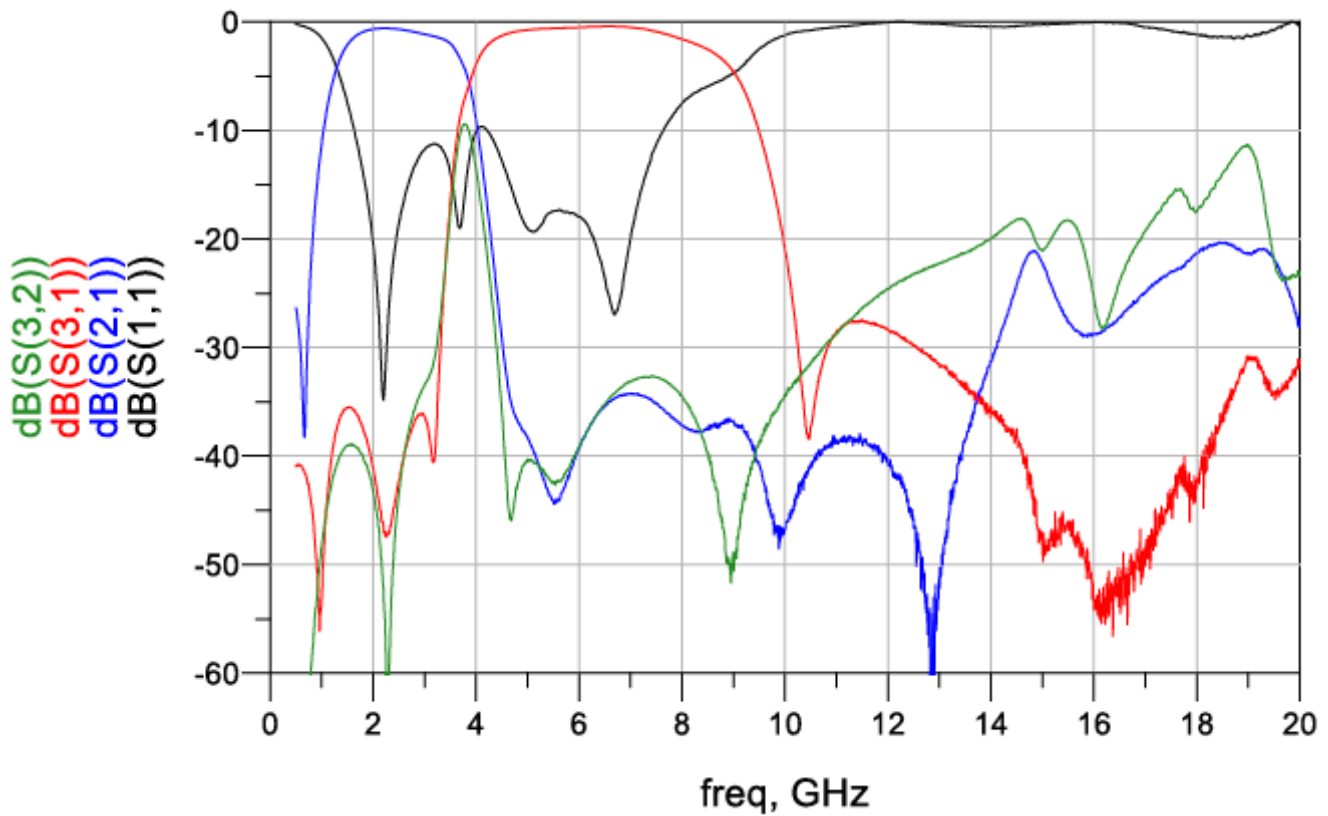
Electrical Characteristics

MEASURING DIAGRAM



Test Instrument :
Agilent E5071C Network Analyzer or equivalent.

ELECTRICAL PERFORMANCES

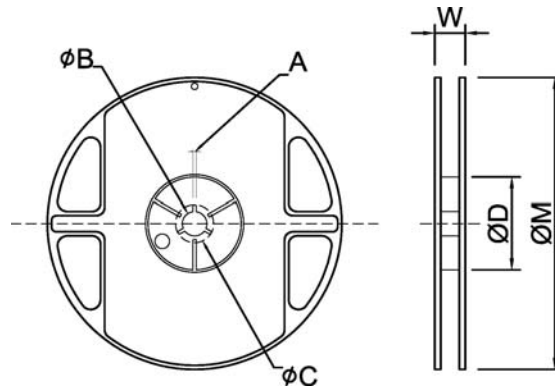


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Taping Specifications

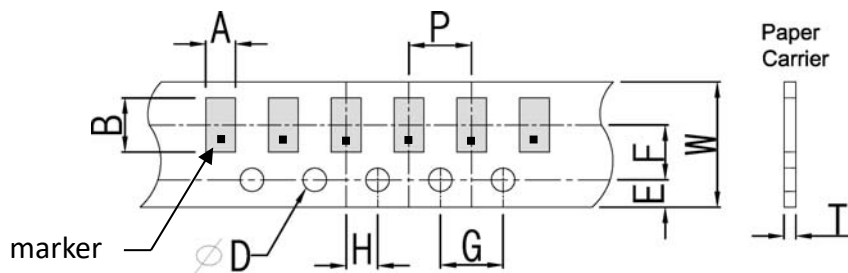
Reel and Taping Specification

Reel Specification



TYPE	SIZE		A	ψ B	ψ C	ψ D	W	ψ M
1608	7"	4K/Reel	2.0±0.5	13.5±1.0	21±1.0	60±1.0	11.5±2.0	178±2.0

Tapping Specification

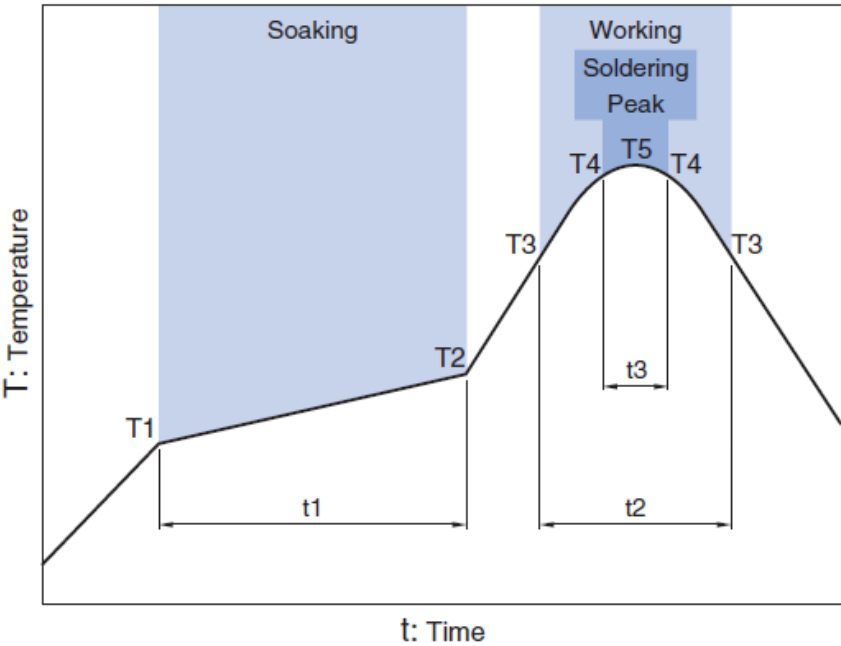


Packaging	Type	A	B	W	E	F	G	H	T	ψ D	P
Paper Type	1608	1.40±0.20	2.20±0.20	8.0±0.20	1.75±0.10	3.0±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50 +0.10 -0	4.0±0.1

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Recommended Reflow Profile

Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	more than 30sec	247 to 253°C	within 10sec	260°C Max.

Revision History

Version	Date	Description
Ver.01	Jul.2024	New issue.