Pulse
A YAGEO Company

TECHNICAL DATA SHEET

Description: 1608 Diplexer

PART NUMBER: DPX1608LKE4R2460A
(Preliminary)

Features:

- Compact Size
- Low loss
- High Soldering Heat Resistance

Applications:

- WiFi

ELECTRICAL SPECIFICATIONS

Low-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	2400~2483	-	1.15	TBD
Return Loss (dB)	2400~2483	TBD	15.9	-
Attenuation (dB)	400~960	TBD	23.2	-
	1425~1557	TBD	16.6	-
	1557~1607	TBD	14.9	-
	1626~1661	TBD	13.3	-
	1710~2025	TBD	4.8	-
	3300~4200	TBD	1.3	-
	4400~4800	TBD	32.6	-
	4800~5000	TBD	44.9	-
	5150~5925	TBD	46.9	-
	5925~7125	TBD	47.1	-
	7200~7500	TBD	44.5	-
	9600~10000	TBD	43.2	-
	12000~12410	TBD	30.5	-
	14412~14892	TBD	24.4	-
	16814~17374	TBD	25.1	-

RoHS COMPLIANT

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Tel: 86 512 6807 9998

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ELECTRICAL SPECIFICATIONS

High-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	5170~7125	-	1.12	TBD
Return Loss (dB)	5170~7125	TBD	9.5	-
Attenuation (dB)	400~915	TBD	27.5	-
	915~960	TBD	27.7	-
	1425~1470	TBD	35.5	-
	1470~1557	TBD	35.5	-
	1557~1607	TBD	42.5	-
	1625~1661	TBD	43.9	-
	1710~2025	TBD	32.0	-
	2300~2400	TBD	32.8	-
	2400~2482	TBD	36.3	-
	2496~2690	TBD	41.3	-
	2690~3560	TBD	13.0	-
	8025~8647	TBD	0.95	-
	8647~10340	TBD	1.72	-
	10340~10600	TBD	11.0	-
	10600~12700	TBD	18.1	-
	12700~13250	TBD	33.4	-
	13250~13400	TBD	36.2	-
	13400~14250	TBD	31.8	-
	14412~14892	TBD	34.1	-
	15510~16200	TBD	35.3	-
	16200~17700	TBD	34.8	-

Common

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Return Loss (dB)	2400~2483	TBD	21.5	-
	5170~7125	TBD	10.8	-

Isolation

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Isolation (dB)	2400~2482	TBD	37.6	-
	5150~7125	TBD	46.4	-
	12000~12410	TBD	30.4	-
	16800~17373	TBD	23.2	-

Operating Temperature Range：-40~85°C
Power Capacity：3W max.

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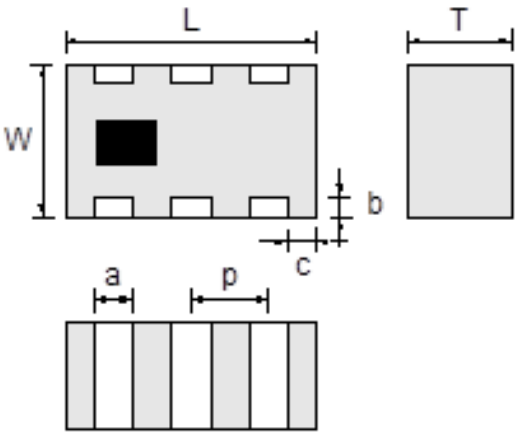
MECHANICAL DIMENSION

Outline



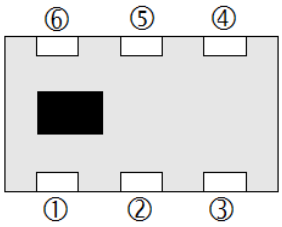
Dimension

L	W	T	a
1.60±0.15	0.80±0.10	0.70 max.	0.20±0.10
b	c	p	
0.15±0.10	0.20±0.10	0.50±0.05	

NOTE：Dimensions in mm.

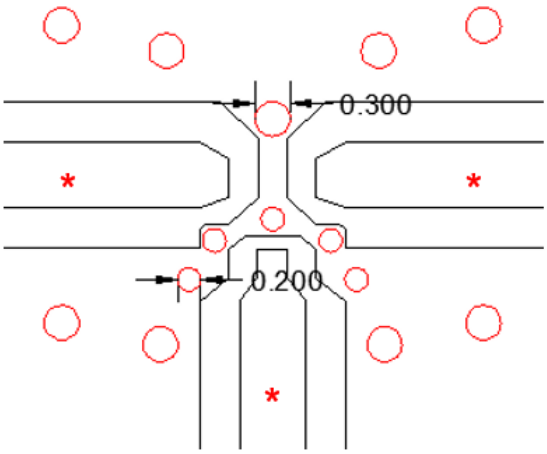
Termination

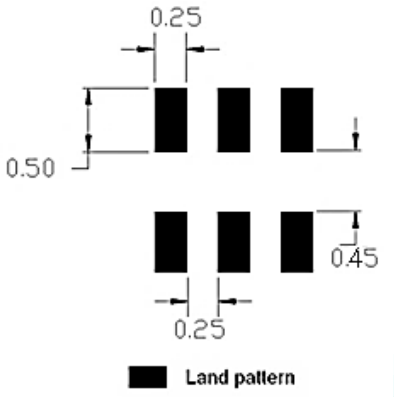
Top View



Terminal name	Function
1	GND
2	Common
3	GND
4	High band
5	GND
6	Low band

Reference design of EVB





Unit：mm

Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

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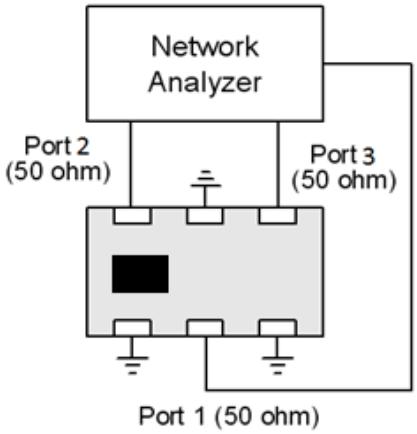
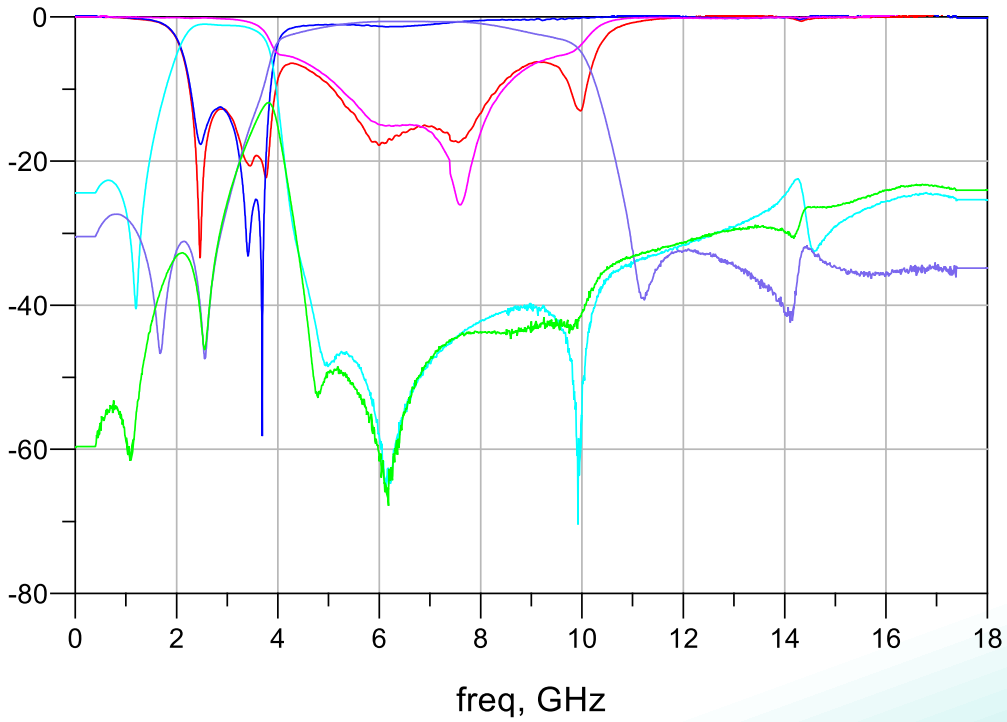
MEASURING DIAGRAM



Test Instrument：
Agilent E5071C Network Analyzer or equivalent.

ELECTRICAL PERFORMANCES



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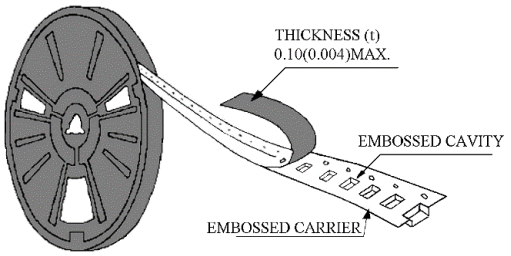
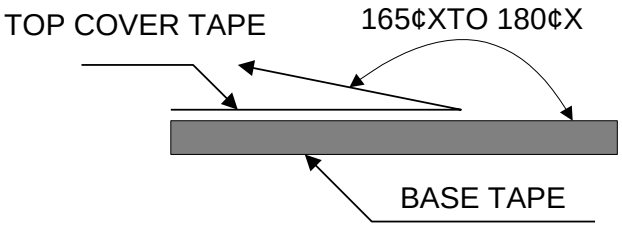
PACKING SPECIFICATION

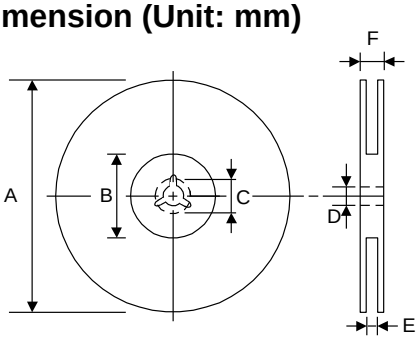
Peel-off force





The force for peeling of cover tape is 10 grams in the arrow direction.

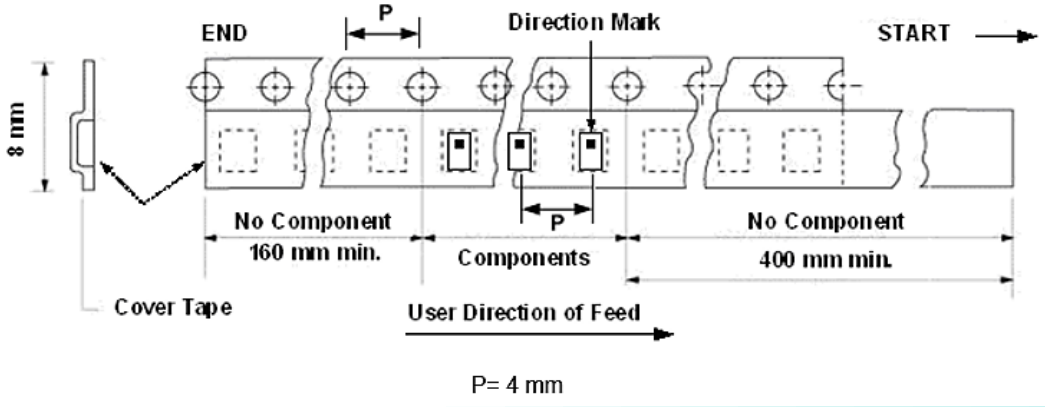
Dimension (Unit: mm)



TYPE	A	B	C	D	E	F
8 mm	178±1	60+0.5 -0	-	13±0.2	9±0.5	12±0.5
12 mm	178±0.3	60±0.2	19.3±0.1	13.5±0.1	13.6±0.1	-

Taping quantity

SERIES	5824 5724	5320 5220	4532	4516	3225	3216 2520	2012 1608	1005 0605
PCS/Reel	5000	3000	1000	2000	2500	3000	4000	10000



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REVISION HISTORY

Revision	Date	Description
Version 1	Mar. 29, 2022	- New issue
Version 2	Aug. 22, 2022	- Update measure electrical.

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