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Pulse
A YAGEO Company

TECHNICAL DATA SHEET

Description: 1608 Diplexer

PART NUMBER: DPX1608LJFHR2455L

Features:

- Compact size
- RoHS compliant

Applications:

- WLAN, 802.11a/b/g/n/ax
- ISM Band

ELECTRICAL SPECIFICATIONS

Low-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB) at 25°C	2400~2500	-	0.35	0.6
Insertion Loss (dB) at -40~85°C	2400~2500	-	-	0.8
Return Loss (dB)	2400~2500	10	24.1	-
Attenuation	4800~5000	30	37.2	-
	5000~5950	30	38.1	-
	7200~7500	20	38.3	-

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RoHS COMPLIANT

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ELECTRICAL SPECIFICATIONS

High-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB) at 25°C	4900~5950	-	0.66	0.78
Insertion Loss (dB) at -40~85°C	4900~5950	-	-	0.98
Return Loss (dB)	4900~5950	10	15.2	-
Attenuation	824~2170	26	31.9	-
	2400~2500	30	43.2	-
	9800~11900	25	28.8	-
	14700~17850	15	18.5	-

Common

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Return Loss (dB)	2400~2500	10	24.1	-
	4900~5950	10	15.0	-

Isolation

Item	Frequency Range (MHz)	Min.	Typ.	Max.
High to Low (dB)	2400~2500	38	43.3	-
	4900~5950	38	39.3	-

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

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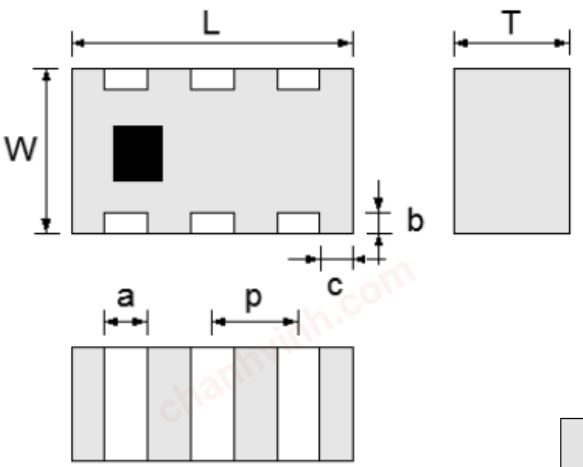
MECHANICAL DIMENSION

Outline



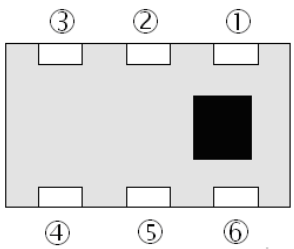
Dimension

L	W	T	a
1.60±0.15	0.80±0.10	0.60±0.10	0.20±0.10
b	c	p	
0.15±0.10	0.20±0.15	0.50±0.05	

NOTE：Dimensions in mm.

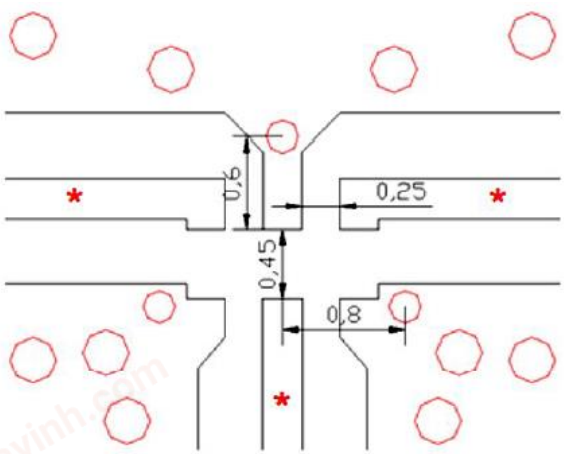
Termination

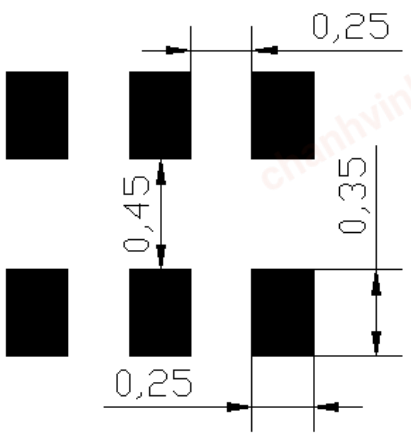
Top View



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

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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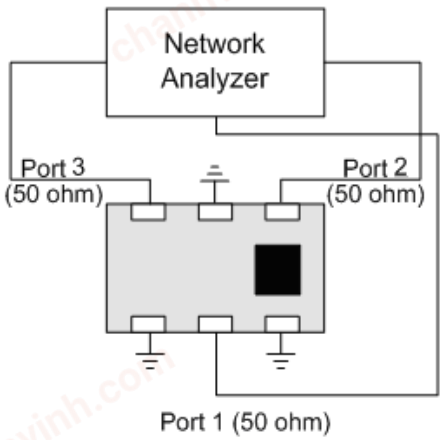
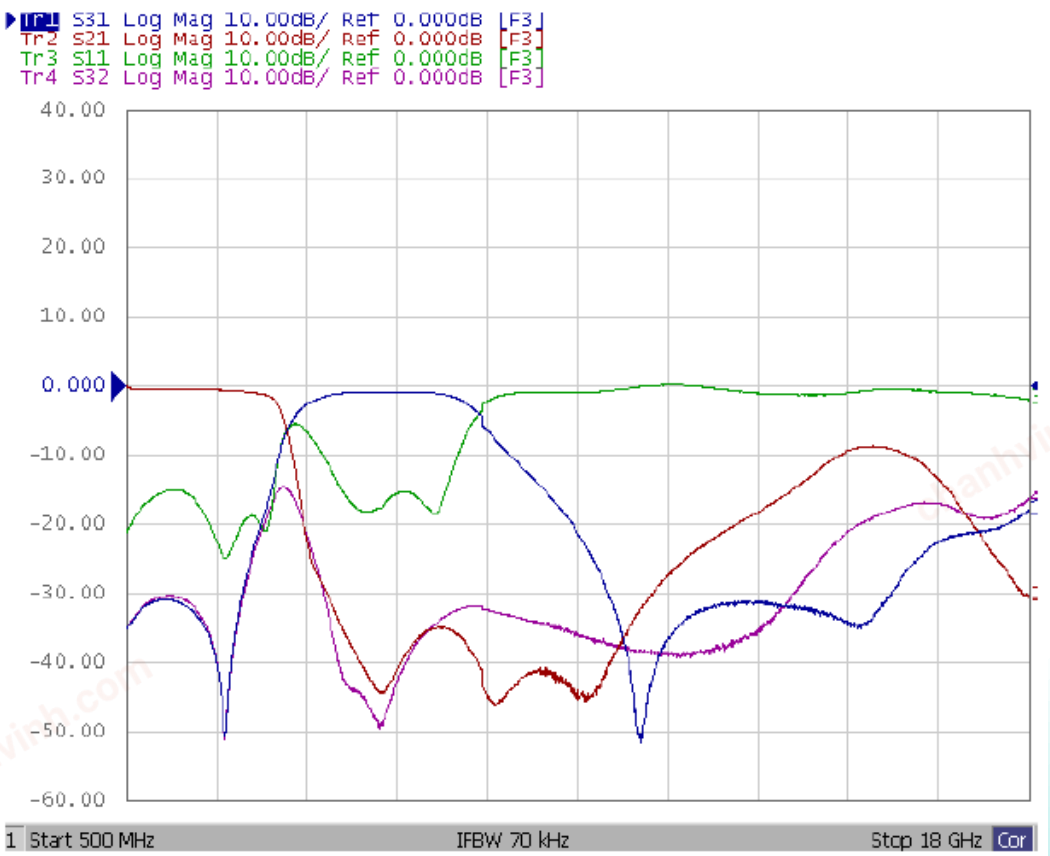
MEASURING DIAGRAM



Test Instrument：
Agilent E5071C Network Analyzer or equivalent.

ELECTRICAL PERFORMANCES



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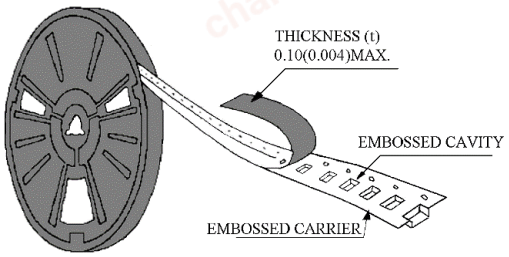
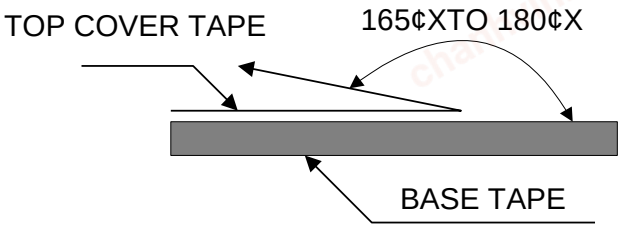
PACKING SPECIFICATION

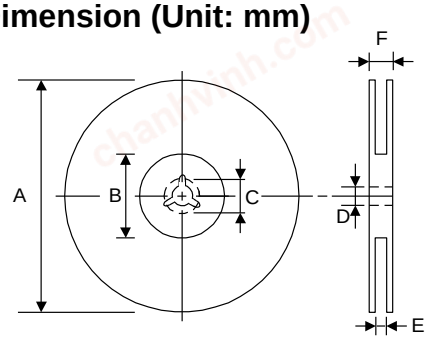
Peel-off force





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

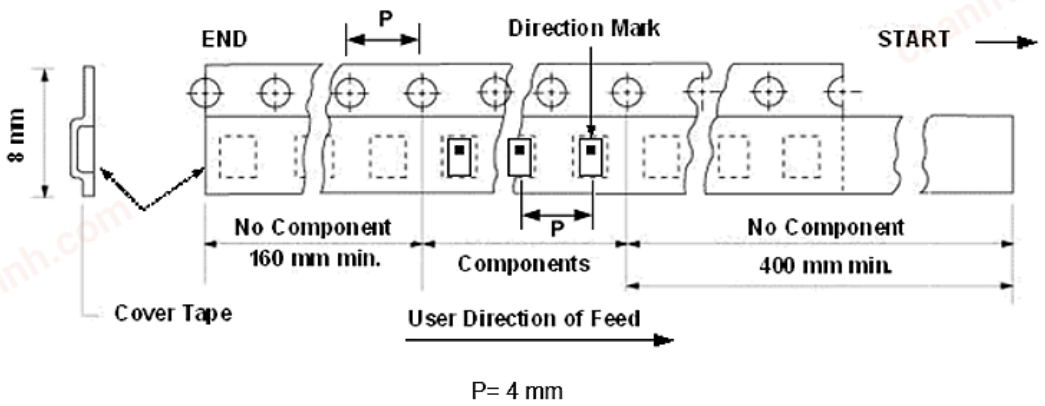
Dimension (Unit: mm)



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. 17, 2022	- New issue

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