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Pulse
A YAGEO Company

TECHNICAL DATA SHEET

Description: 1005 Diplexer

PART NUMBER: DPX1005LKGBRWH60L

Features:

- Compact size
- RoHS compliant

Applications:

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

ELECTRICAL SPECIFICATIONS

Low-Band

Item	Frequency Range(MHz)	Min.	Typ.	Max.
Insertion Loss(dB)	1164~1610	-	0.22	0.40
	2400~2500	-	0.29	0.50
	2496~2690	-	0.34	0.65
Insertion Loss(dB) at -40~85°C	1164~1610	-	-	0.50
	2400~2500	-	-	0.60
	2496~2690	-	-	0.75
Return Loss (dB)	1164~2500	12.0	24.0	-
Attenuation (dB)	4800~6000	16.0	21.7	-
	5150~7125	18.0	25.1	-
	7200~7500	20.0	24.7	-

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For more information:

RoHS COMPLIANT

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ELECTRICAL SPECIFICATIONS

High-Band

Item	Frequency Range(MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	5150~5950	-	0.55	0.85
	5950~6245	-	0.49	0.85
	6245~7125	-	0.62	0.85
Insertion Loss (dB) at -40~85°C	5150~5950	-	-	0.95
	5950~6245	-	-	1.00
	6245~7125	-	-	1.00
Return Loss (dB)	5150~5950	10.0	19.1	-
	5950~6245	10.0	18.3	-
	6245~7125	10.0	17.2	-
Attenuation (dB)	500~2400	25.0	28.9	-
	2400~2500	32.0	37.6	-
	2500~2690	25.0	36.5	-
	10300~11900	12.0	21.5	-
	11900~12490	15.0	22.4	-
	12490~14250	14.0	19.7	-
	15510~21375	10.0	19.7	-

Common

Item	Frequency Range(MHz)	Min.	Typ.	Max.
Return Loss (dB)	1164~2500	12.0	24.1	-
	5150~5950	10.0	18.7	-
	5950~6245	10.0	19.1	-
	6245~7125	10.0	19.1	-

Isolation

Item	Frequency Range(MHz)	Min.	Typ.	Max.
Low to High (dB)	2400~2500	30.0	36.2	-
	5150~5950	18.0	25.5	-
	5950~6245	18.0	25.5	-
	6245~7125	18.0	25.5	-

Operating Temperature Range：-40~85°C

Power Capacity：3W max.

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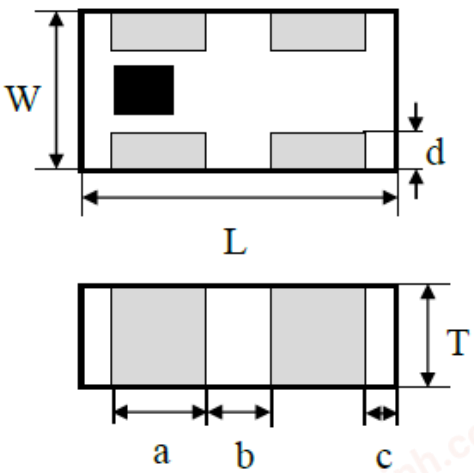
MECHANICAL DIMENSION

Outline



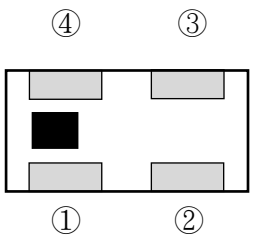
Dimension

L	W	T	a
1.00±0.10	0.50±0.10	0.40 max.	0.30±0.10
b	c	d	
0.20±0.10	0.10±0.10	0.12±0.07	

NOTE：Dimensions in mm.

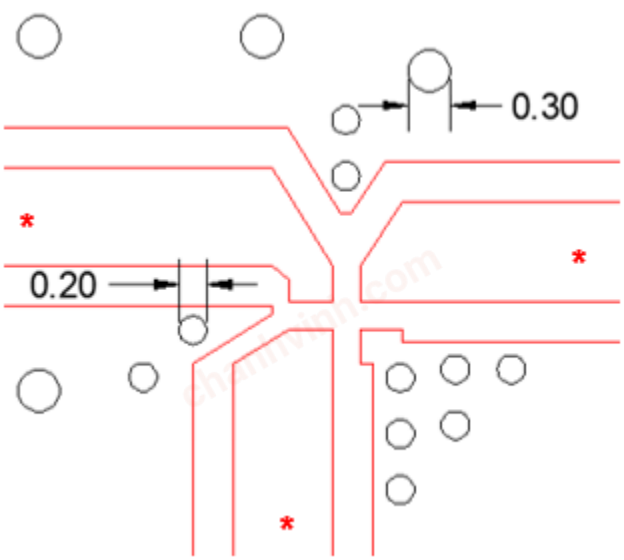
Termination

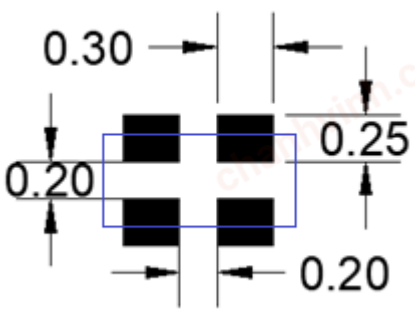
Top View



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

Reference design of EVB





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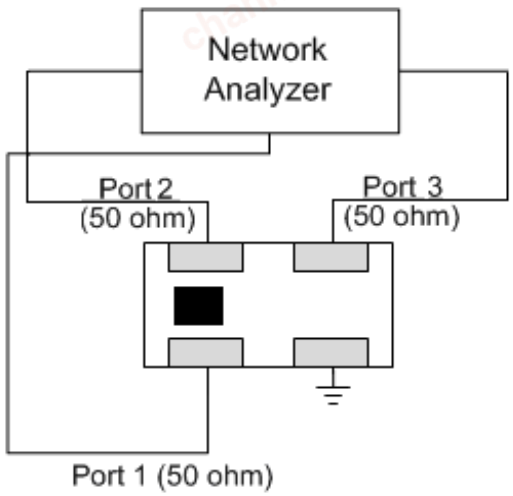
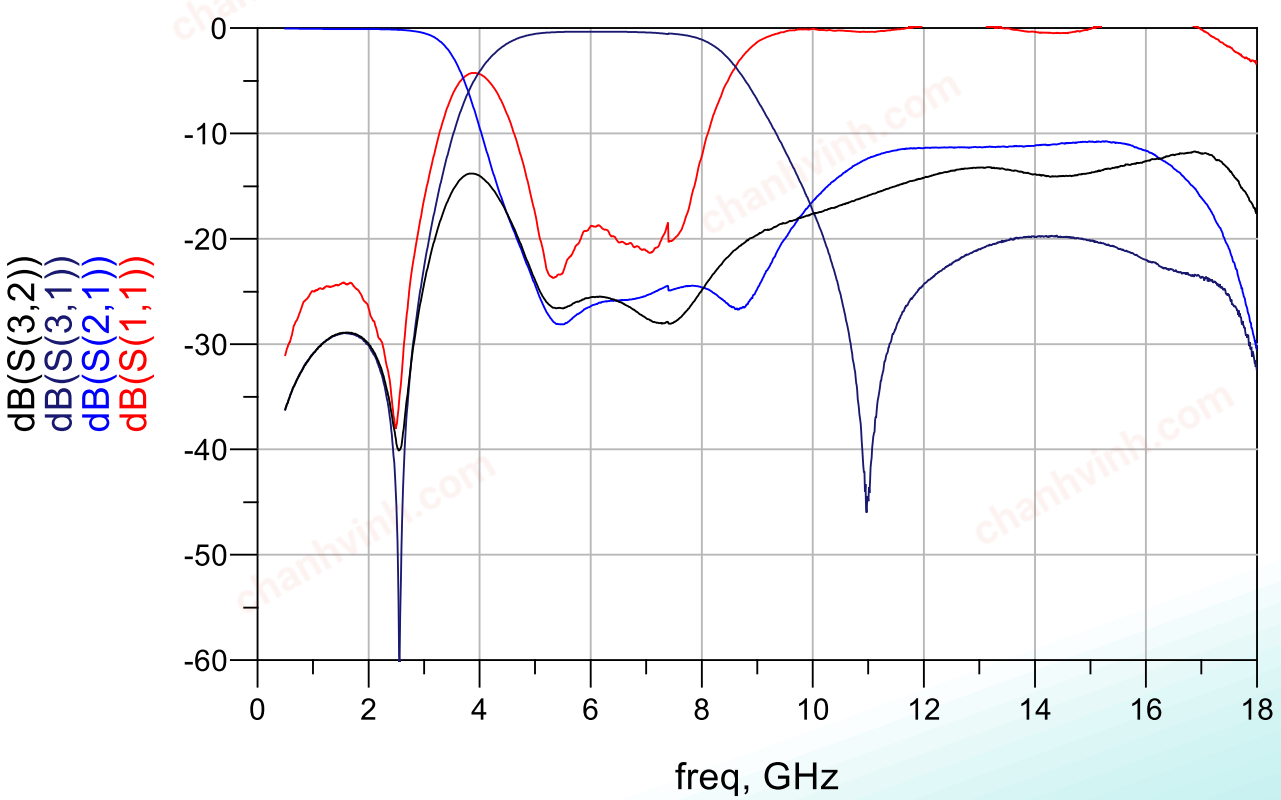
MEASURING DIAGRAM



Test Instrument：
Agilent E5071C Network Analyzer or equivalent.

ELECTRICAL PERFORMANCES



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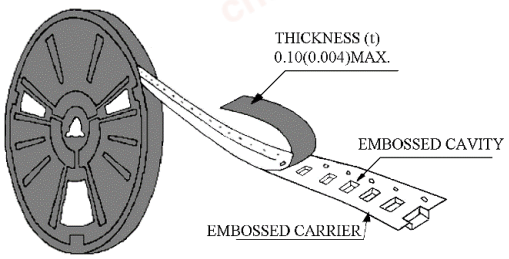
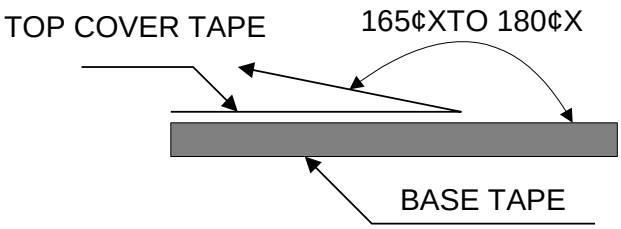
PACKING SPECIFICATION

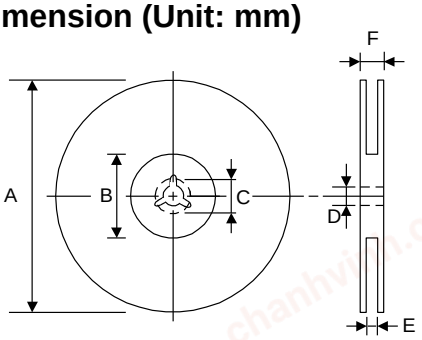
Peel-off force





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

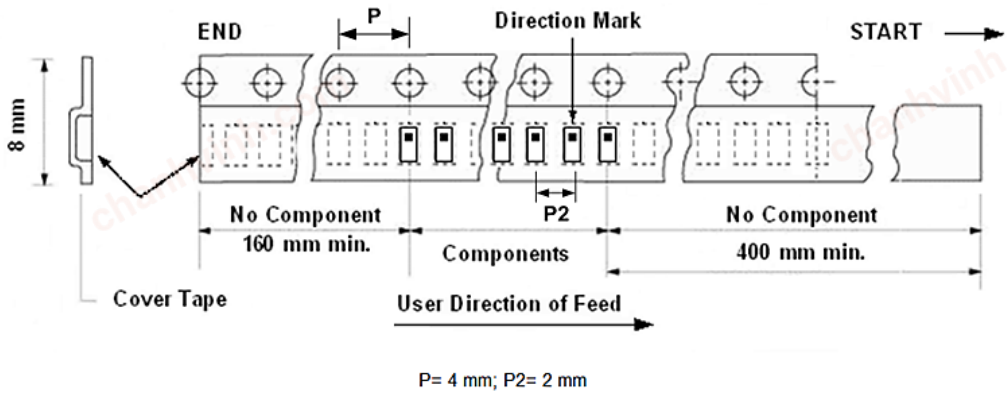
Dimension (Unit: mm)



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	Dec. 30, 2021	- New issue.
Version 2	Aug. 11, 2021	- Tightened insertion loss.

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