

Diplexer

WGDP-WIFIX001

2.4~2.5 GHz /4.9~5.95GHz

Ver. A
20250317

Maximum Rating

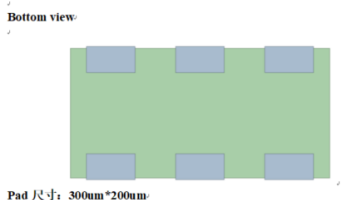
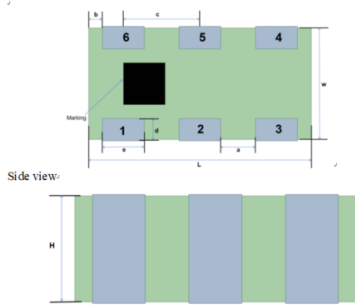
Operating Temperature	-40°C~+85°C
Storage Temperature	-40°C~+85°C
RF Input Power	2W max at 25°C

Pin Connections

Low Pass Port	6
High Pass Port	4
Common Port	2
Ground	1,3,5

Dimension & Layout

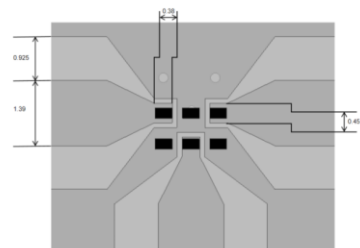
Length--L(mm)	1.6±0.05
Width--W(mm)	0.8±0.05
Height--H(mm)	0.6±0.05



Pad 尺寸: 300um*200um

Symbol	Distance (mm)	Description
a	0.25±0.01	pin 2,3 edge to edge distance
b	0.1±0.01	pin 6 edge to edge distance
c	0.55±0.01	pin 5,6 middle to middle distance
d	0.2±0.01	pin 1 width
e	0.3±0.01	pin 1 length

参考测试 PCB 板 Land Pattern



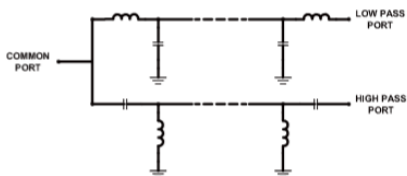
单位: mm

Features

- High Performance
- 2.4~2.5GHz/4.9~5.95GHz Dual Wif bands
- New circuit topology for excellent return loss and low insertion loss
- High balance performance on LTCC Technology



RoHS Compliant



Functional Schematic

Electrical Specifications⁽¹⁾ at 25°C

Low-Band

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit
Insertion Loss	2400-2500	-	0.44	0.6	dB
Return Loss	2400-2500	14	21	-	dB
Attenuation	4900-5950	27	34	-	dB
Characteristic Impedance	50				Ω

High-Band

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit
Insertion Loss	4900-5950	-	0.67	1.0	dB
Return Loss	4900-5950	12	18	-	dB
Attenuation	30-2700 9800-11900 14700-17850	28 22 10	35 25 14	- - -	dB
Characteristic Impedance	50				Ω

Common

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit
Isolation	30-2700 4900-5950	28 27	35 34	- -	dB dB
Return Loss	2400-2500 4900-5950	14 14	22 18	- -	dB dB
Characteristic Impedance	50				Ω

Notes

- a. The specifications are tested at 25°C±5°C, relative humidity 55~75%.
b. Other quality and characteristic not specify in this datasheet.
Please contact us for detail requirements.



Well Genius Technology (Shanghai) Ltd.

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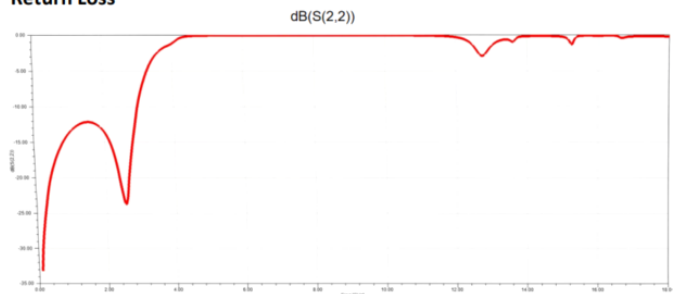
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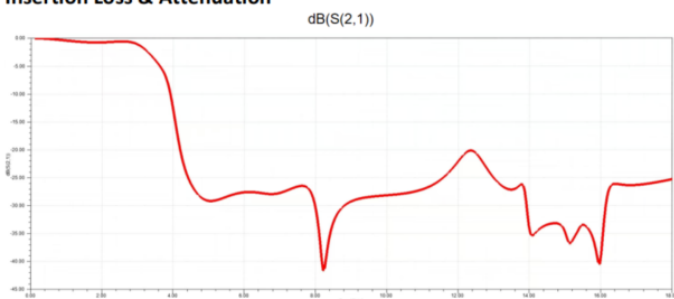
Frequency Characteristics

LOW-BAND

Return Loss

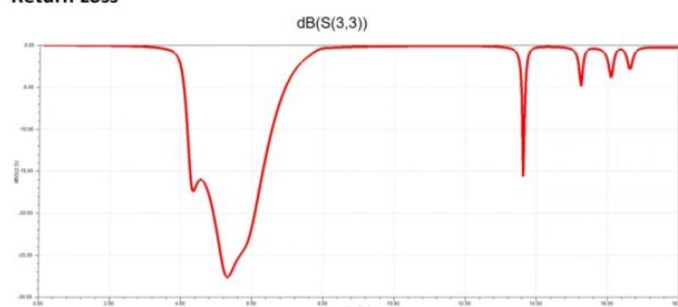


Insertion Loss & Attenuation

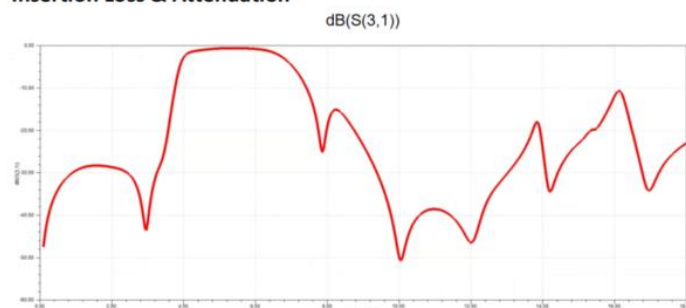


HIGH-BAND

Return Loss

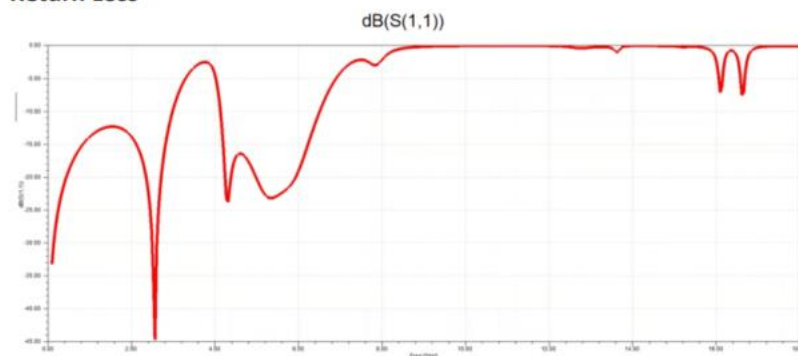


Insertion Loss & Attenuation

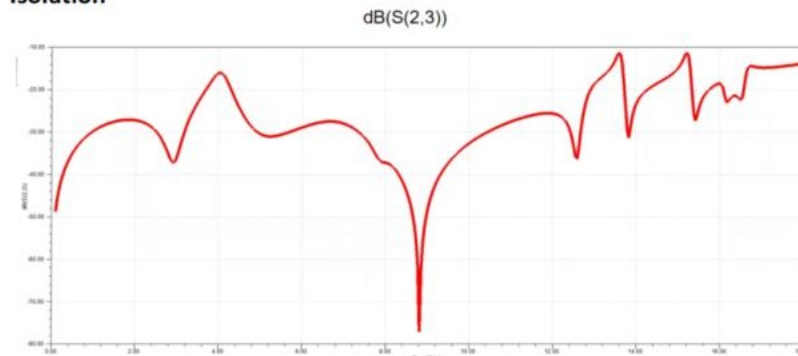


COMMON PORT

Return Loss



Isolation

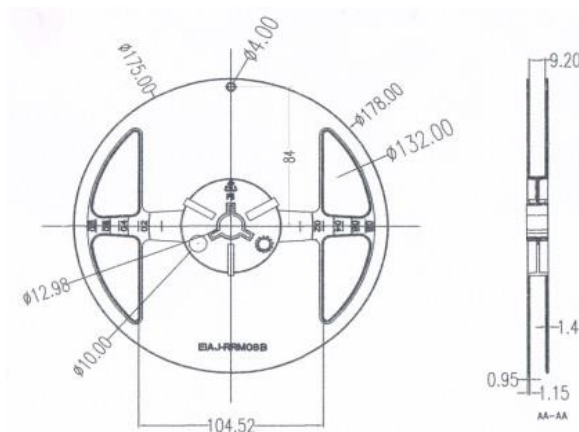


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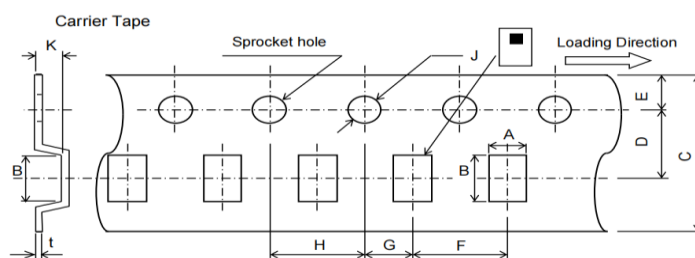
Product Coding Information

■ Tray Specifications



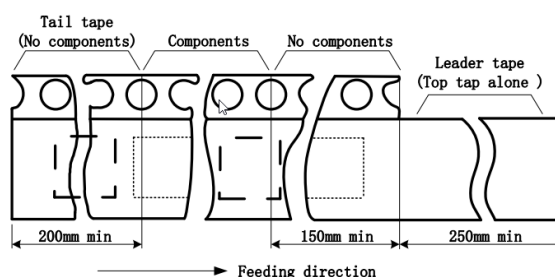
Material: Plastic

■ Carrier Specifications



Material: Plastic

■ Strip Information



Component size	A	B	C	D	E	F	G	H	J	K	t
1.6 x 0.8 mm	0.98	1.8	8.0	3.5	1.75	4.0	2.0	4.0	1.6	0.8	0.25

The length of the cavity at the tail of the carrier tape should be at least 200mm, the length of the cavity at the head of the carrier tape should be at least 150mm, and the length of the cover tape at the head should be extended by at least 250mm.



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