

2.4/5GHz 1608 Diplexer: DPX1608R24554K80

Applications:

WLAN, 802.11b/g, ISM Band...

Features

SMD, high reliability, ultra Impact...

Part number

DPX 1608 R 2455 4K 80
 (1) (2) (3) (4) (5)

(1)Size Code	1.6x0.8mm
(2) Packing	Tape and reel
(3) Frequency	2.4/5GHz
(4) Packing Number	4K
(5)Type	80

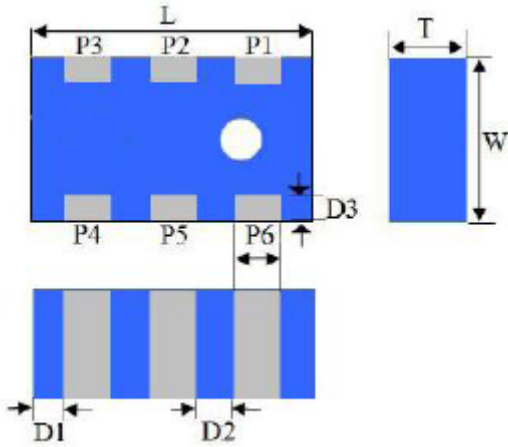
Electrical Specification

DESCRIPTION	VALUE	
	LOW Band	High Band
Pass Band	2400~2500MHz	4900~6000MHz
Insertion Loss	0.7dB (Max) at 25°C	0.8dB (Max) at 25°C
VSWR	2.0(Max)	1.7(Max)
Attenuation	20dB(Min).@4.8~5GHz 20dB(Min).@7.2~7.5GHz	28dB(Min).@860~960MHz 23dB(Min).@1545~1605MHz 23dB(Min).@1710~1990GHz 28dB(Min).@2.17GHz 8dB(Min).@8.1GHz 15dB(Min).@8.82~9.8GHz 27dB(Min).@9.8~11.8GHz
Isolation	Middle Band to High Band: 20dB (Min). @4.9~5.95GHz	
Operating Temperature	-40 ~ +85 °C	

The specification is defined on EVB.

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Dimension and Terminal Configuration



Dimension (mm)	
L (mm)	1.60 ± 0.15
W (mm)	0.80 ± 0.15
T (mm)	0.60 ± 0.15
P1 (mm)	0.20 ± 0.15
P2 (mm)	0.20 ± 0.15
P3 (mm)	0.20 ± 0.15
P4 (mm)	0.20 ± 0.15
P5 (mm)	0.20 ± 0.15
P6 (mm)	0.20 ± 0.15
D1 (mm)	0.20 ± 0.15
D2 (mm)	0.30 ± 0.10
D3 (mm)	0.15 ± 0.10

No.	Terminal Name
P1	Low band port
P2	Ground
P3	High band port
P4	Ground
P5	Common port
P6	Ground

P.S : Symmetrical,

No direction

Evaluation Board Reference

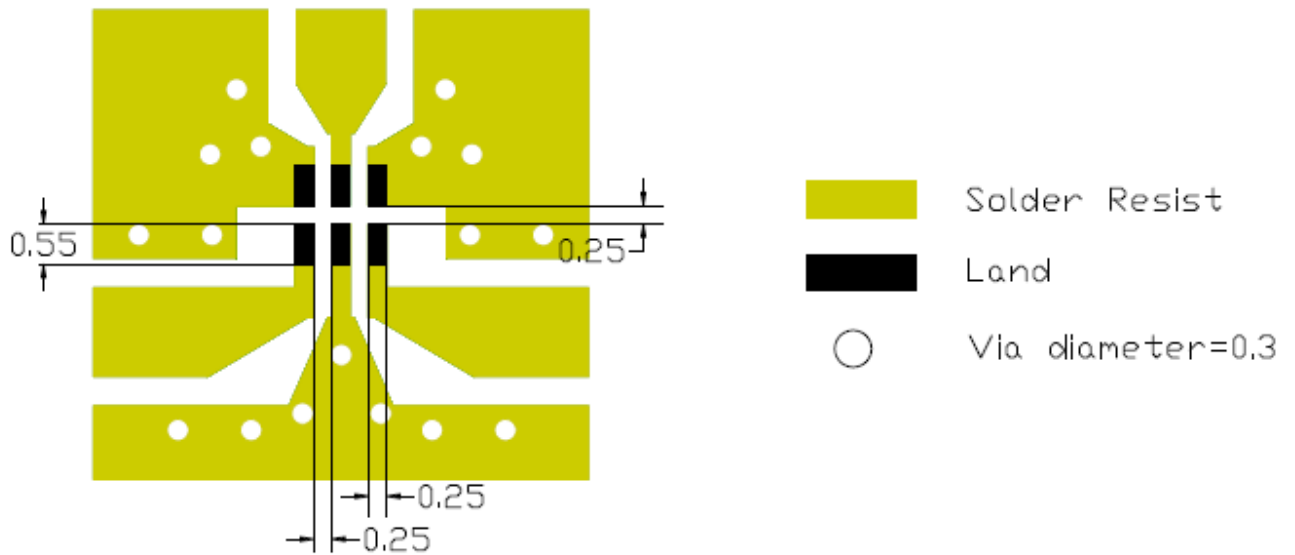


Fig.2 Reference design of evaluation board

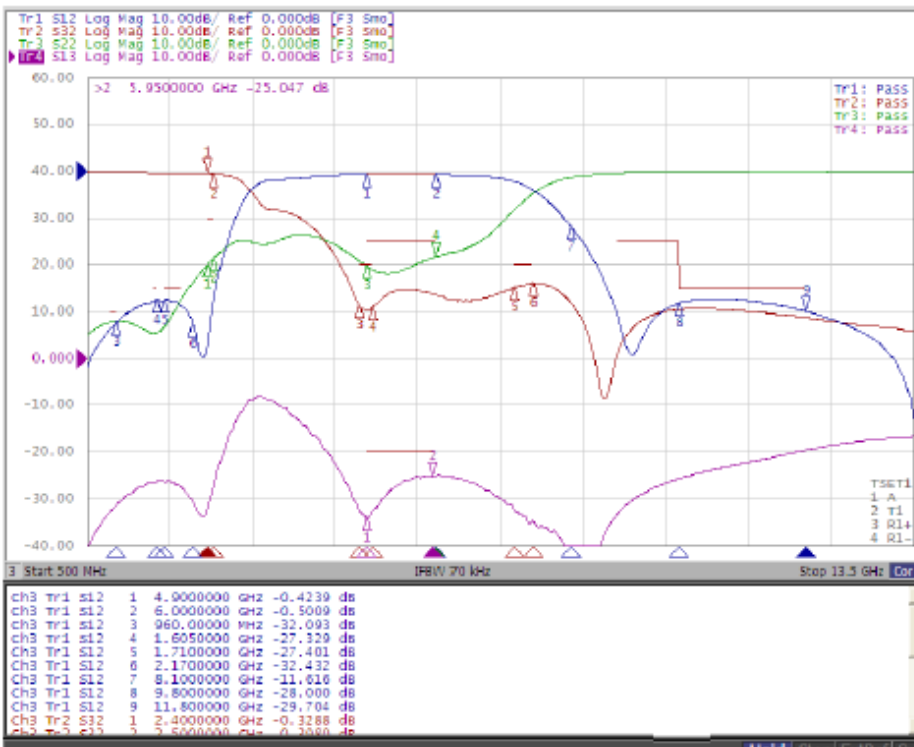
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Electrical Characteristics

-Measured on Agilent E5071C Network Analyzer

-Port 1, 2 and 3 in Network Analyzer is connected to device as below

- Port 1 : High band port
- Port 2 : Common port
- Port 3 : Low band port
- S22 : Return loss for low and high band
- S32 : Insertion loss and attenuation for low band
- S12 : Insertion loss and attenuation for high band

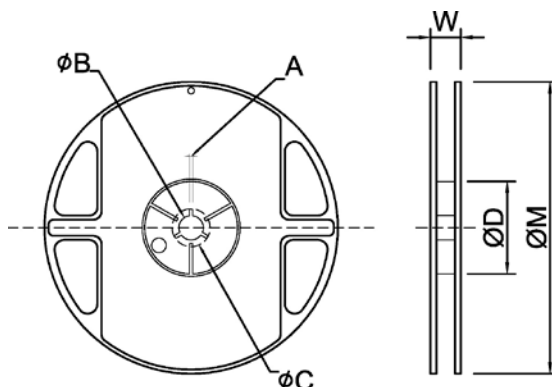


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Taping Specifications

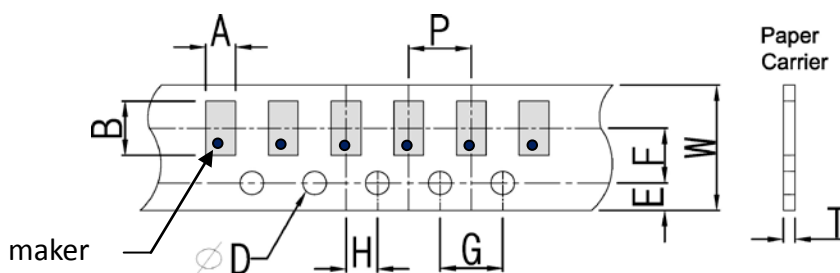
Reel and Taping Specification

Reel Specification



TYPE	SIZE	A	ϕB	ϕC	ϕD	W	ϕM	
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

Taping Specification

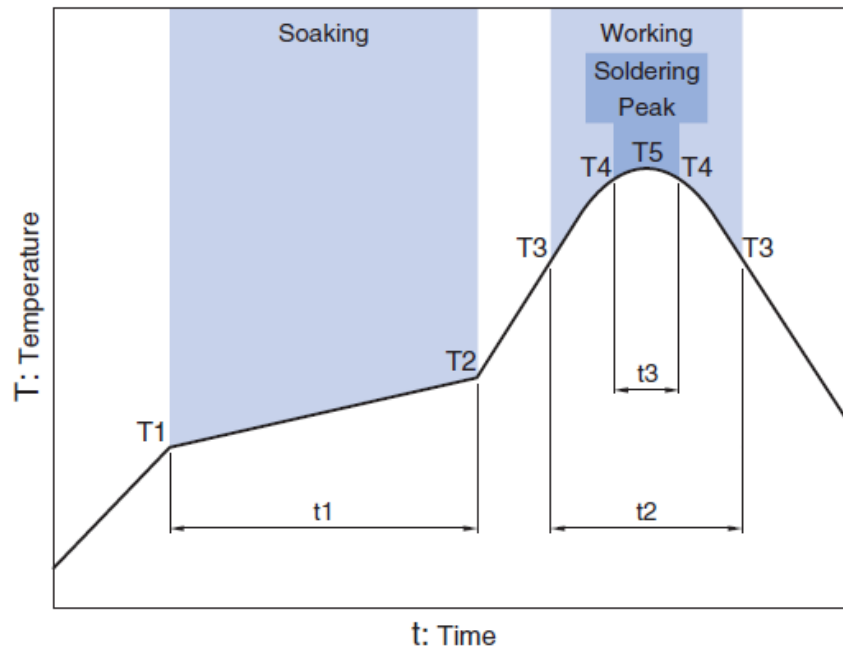


Packaging	Type	A	B	W	E	F	G	H	T	ϕD	P
Paper Type	1608	1.40±0.20	2.20±0.20	8.0±0.20	1.75±0.10	3.0±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50 +0.10 -0	4.0±0.1

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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.

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