

**Description**: 2520 Triplexer

PART NUMBER: TPX2520LKTDRWH34L

## **Features:**

- · Compact Size
- Low loss
- · High Soldering Heat Resistance

# **Applications:**

For LTE/NR application

## **ELECTRICAL SPECIFICATIONS**

#### Low-Band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	617~1990	-	0.53	0.8
Insertion loss (dB)	2300~2496	-	0.68	0.9
	2496~2690	-	1.1	1.35
Return loss (dB)	617~2690	10	14.1	-
	3300~3700	15	17.2	-
	3700~3800	15	17	-
Attonuction (dP)	3800~4200	15	17	-
Attenuation (dB)	4400~5000	25	35.1	-
	5150~5925	25	42.8	-
	5925~12750	10	18	-

#### Middle-band

Item	Frequency Range (MHz)	Min.	Тур.	Max.	
Insertion loss (dB)	3300~3800 - 1.07				
Return loss (dB)	3300~3800	10	16.5	-	
Attonuction (dP)	617~2690	12	13.8	-	
Attenuation (dB)	4400~5000	14	15.3	-	

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# **ELECTRICAL SPECIFICATIONS**

**High-Band** 

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion loss (dB)	4400~5000	-	0.91	1.35
Return loss (dB)	4400~5000	10	14	-
	617~2690	16	18.1	-
	2170~3150	14	16	-
	3300~3600	14	16.9	-
Attenuation (dB)	3600~3800	17	21.1	-
	3800~4200	-	2.1	-
	8800~10000	15	17.1	-
	13200~15000	5	11.9	-

#### Common

<u> </u>				
Item	Frequency Range (MHz)	Min.	Тур.	Max.
	617~2690	10	14.1	-
Return loss (dB)	3300~3800	10	16.5	-
	4400~5000	10	14	-



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## **ELECTRICAL SPECIFICATIONS**

#### Isolation

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	617~960	16	18.4	-
	1695~1710	15	17	-
Low to Middle band (dB)	1710~2200	15	17	-
Low to Middle barid (db)	2300~2690	14	15.3	-
	3300~3800	14	16.6	-
	5150~5925	18	22.1	-
	617~960	25	43.4	-
	1427~1606	25	38.9	-
Middle to High band (dP)	1710~2690	25	28	-
Middle to High band (dB)	3300~3600	16	18.2	-
	3600~3800	16	24.3	-
	4400~5000	15	16.8	-
	617~960	22	25.6	-
	1427~1606	18	21.3	-
	1695~1710	18	20.8	-
Low to High band (dB)	1710~2690	16	18.4	-
	3300~3800	22	41.5	-
	4400~5000	28	31.6	-
	5150~5925	30	45.2	-

Operating Temperature Range: -40~85°C

Power Capacity: 3W max.

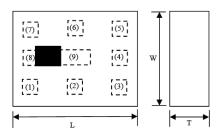


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## **MECHANICAL DIMENSION**

# **Outline**



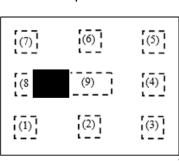
## **Dimension**

L	W	Т	а
2.50±0.15	2.00±0.15	0.65max.	0.40±0.10
b	С	d	е
0.55±0.10	0.30±0.10	0.40±0.10	0.90±0.15

NOTE: Dimensions in mm.

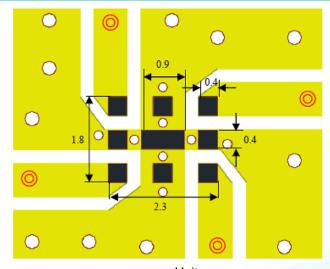
	<b>—</b>	
1	e	
d A		
'		<del>^</del>
	<b>4</b> b	<b>→</b>

<u>Termination</u>
Top View



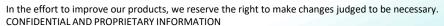
Terminal name	Dimension
1	Common
2	GND
3	High band
4	GND
5	Middle band
6	GND
7	Low band
8	GND
9	GND

# Reference design of EVB



Unit: mm

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



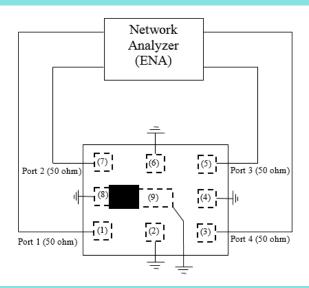




**Description**: 2520 Triplexer

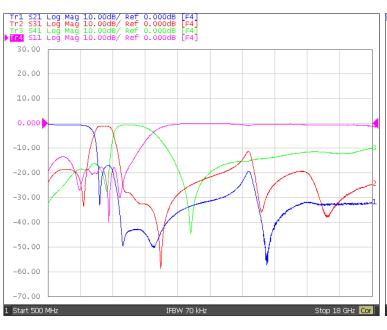
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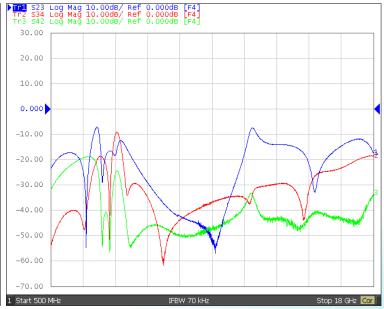
## **MEASURING DIAGRAM**



Test Instrument : Agilent E5071C Network Analyzer.

## **ELECTRICAL PERFORMANCES**





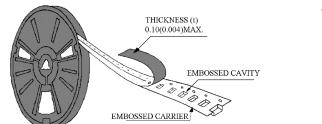


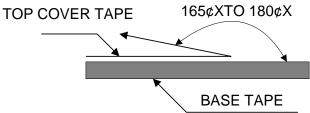
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## **PACKING SPECIFICATION**

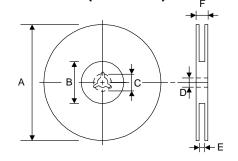
### Peel-off force





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

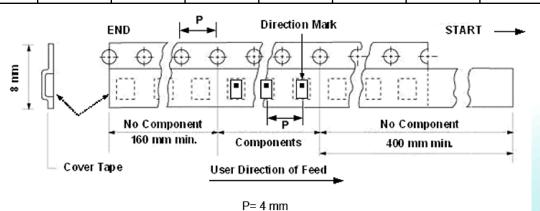
## **Dimension (Unit: mm)**



TYPE	A	В	С	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

Version 1

Date

Apr. 13, 2022

### **TECHNICAL DATA SHEET**

**Description**: 2520 Triplexer

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REVISION HISTORY	
Description	
- New issue	