

Description: 2520 Triplexer

PART NUMBER: TPX2520LKTCR0913L

**Features:**

- Compact Size
- Low loss
- High Soldering Heat Resistance

**Applications:**

- For LTE/NR application

**ELECTRICAL SPECIFICATIONS**

**Low-Band**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	698~960	-	0.7	0.8
Return loss (dB)	698~803	14	23.7	-
	803~960	14	17.8	-
Attenuation (dB)	1424~1511	7	11.8	-
	1710~2170	12	18.8	-
	2500~2690	27	45.8	-
	3300~4200	35	53.9	-
	4400~5000	35	49.0	-

**Middle-band**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	1427~1511	-	1.12	1.35
	1710~2170	-	1.15	1.30
Return loss (dB)	1427~1511	14	26.8	-
	1710~2170	14	17.8	-
Attenuation (dB)	698~960	14	17.0	-
	2500~2690	10	21.4	-
	3300~4200	15	25.0	-
	4400~5000	15	25.7	-

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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**ELECTRICAL SPECIFICATIONS**

**High-Band**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	2496~2690	-	1.32	1.7
	3300~3800	-	0.41	0.6
	3800~4200	-	0.41	0.6
	4400~5000	-	0.40	0.6
Return loss (dB)	2496~2690	14	23.2	-
	3300~3800	14	20.0	-
	3800~4200	12	17.0	-
	4400~5000	12	16.1	-
Attenuation (dB)	698~960	18	33.3	-
	1427~1511	16	26.8	-
	1710~2170	15	17.8	-

**Common**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Return loss (dB)	698~803	14	17.7	-
	803~960	14	18.9	-
	1427~1511	14	16.0	-
	1710~2170	14	21.6	-
	2496~2690	14	23.2	-
	3300~3800	14	20.0	-
	3800~4200	12	17.0	-
	4400~5000	12	16.1	-

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**ELECTRICAL SPECIFICATIONS**

**Isolation**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Low to Middle band (dB)	698~960	14	17.8	-
	1427~1511	7	10.7	-
	1710~2170	13	18.1	-
Low to High band (dB)	698~960	15	32.4	-
	2496~2690	30	45.2	-
	3300~3800	30	48.6	-
	3800~4200	30	48.6	-
	4400~5000	30	49.4	-
Middle to High band (dB)	1427~1511	15	27.0	-
	1710~2170	15	20.4	-
	2496~2690	13	22.9	-
	3300~3800	15	25.4	-
	3800~4200	15	25.4	-
	4400~5000	15	25.2	-

Operating Temperature Range : -40~85°C

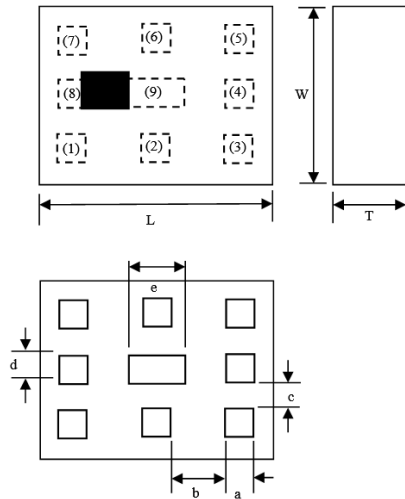
Power Capacity : 3W max.

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MECHANICAL DIMENSION

Outline



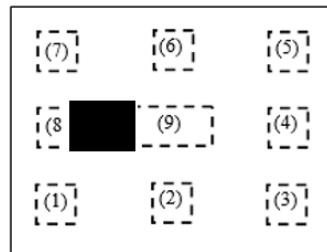
Dimension

L	W	T	a
2.50±0.10	2.00±0.10	0.65max.	0.40±0.10
b	c	d	e
0.55±0.10	0.30±0.10	0.40±0.10	0.90±0.15

NOTE : Dimensions in mm.

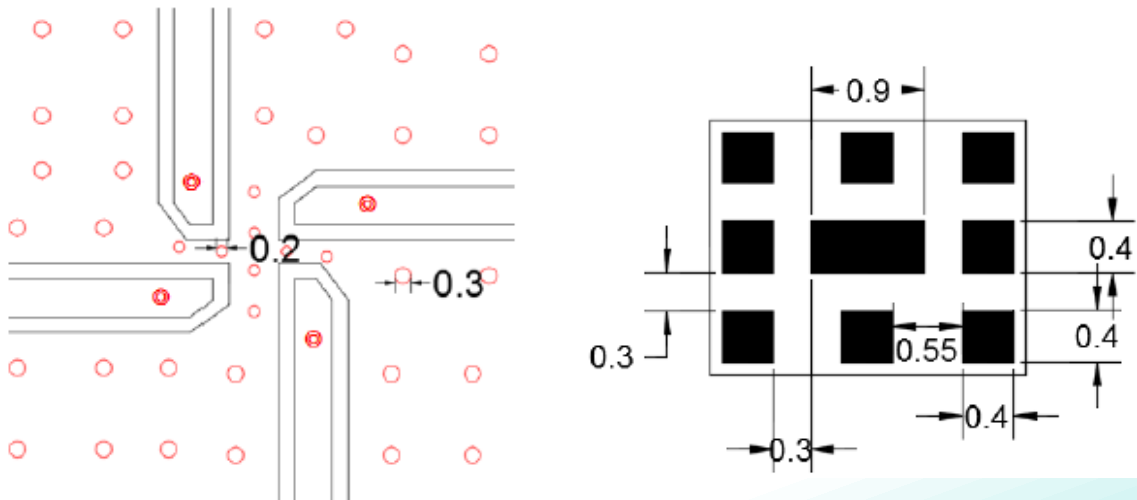
Termination

Top View



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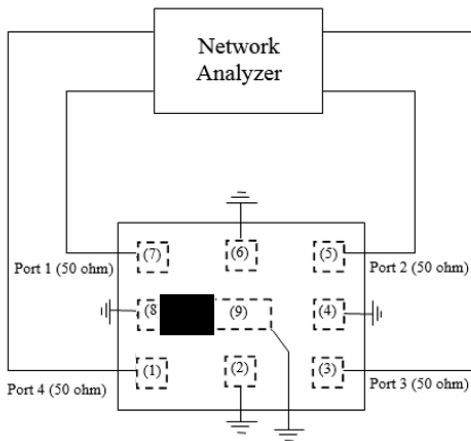
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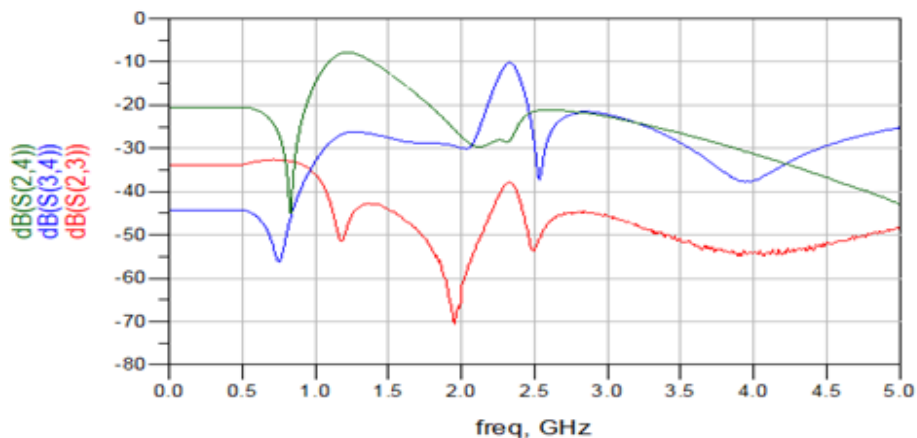
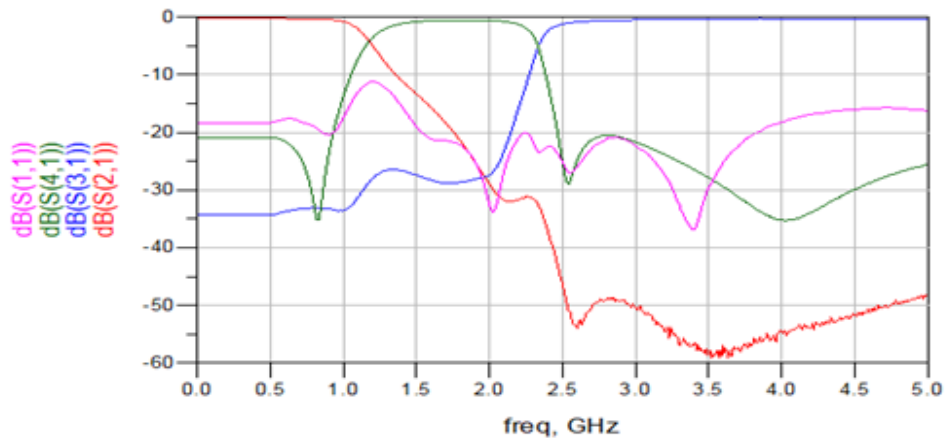
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MEASURING DIAGRAM



Test Instrument :  
Agilent E5071C Network Analyzer or equivalent.

ELECTRICAL PERFORMANCES



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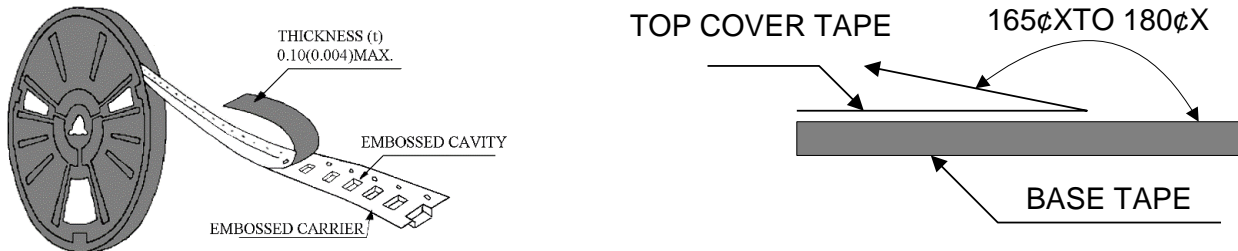
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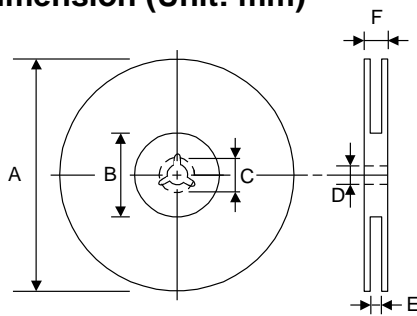
PACKING SPECIFICATION

Peel-off force



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

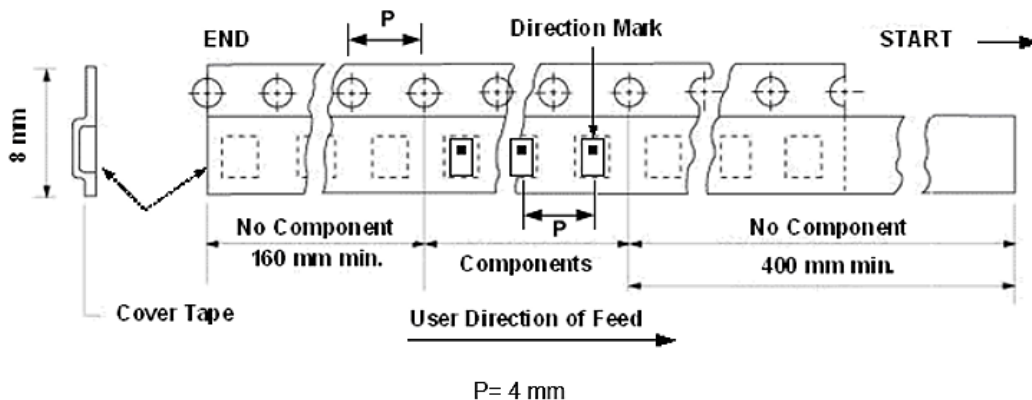
Dimension (Unit: mm)



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	Apr. 13, 2022	- New issue