

Description: 2520 Triplexer

PART NUMBER: TPX2520LKTCR0913L

## **Features:**

## Compact Size

# **Applications:**

• For LTE/NR application

- Low loss
- High Soldering Heat Resistance

# **ELECTRICAL SPECIFICATIONS**

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

#### **Middle-band**

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

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

#### Common

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	698~803	14	17.7	-
	803~960	14	18.9	-
	1427~1511	14	16.0	-
Poturn Jose (dP)	1710~2170	14	21.6	-
Return loss (dB)	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

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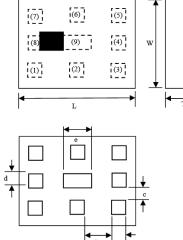
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## **MECHANICAL DIMENSION**

Dimension

## **Outline**



(7)	(6)	(5)		
(8)	(9)	(4)	w	
(1)	(2)	(3)	Ţ	
I	L			← <sub>T</sub> →
	◄ ►			
	e			
			¥	
			c	

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

NOTE : Dimensions in mm.

Dimension

High band

Middle band

R<sub>o</sub>HS

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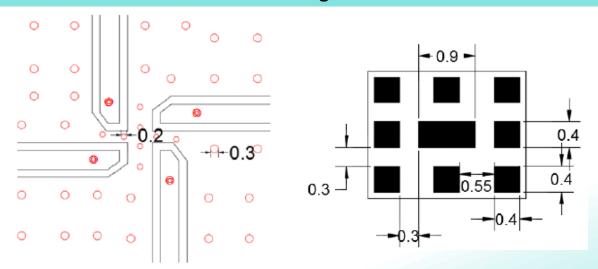
Low band GND Common GND GND

GND

GND

<u>Termin</u>	ation	Terminal name
<b>-</b> .,		1
Top V	iew	2
		3
(7) (6)	(5)	4
	·'	5
(8 (9)	(4)	6
		7
(1)	(3)	8
		9

#### **Reference design of EVB**



Unit : mm

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

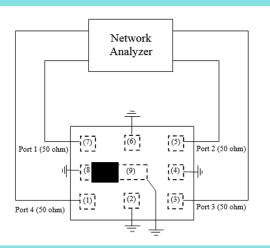
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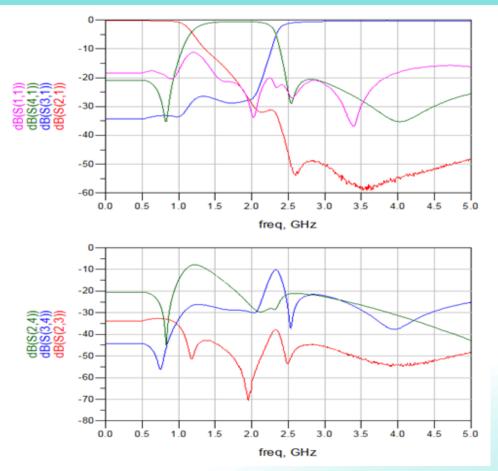
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## **MEASURING DIAGRAM**



Test Instrument : Agilent E5071C Network Analyzer or equivalent.

## **ELECTRICAL PERFORMANCES**



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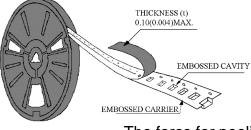


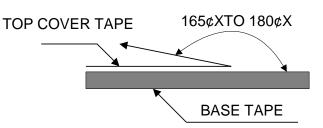
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## **PACKING SPECIFICATION**

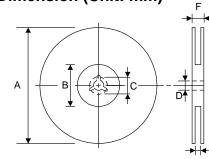
#### **Peel-off force**





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

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



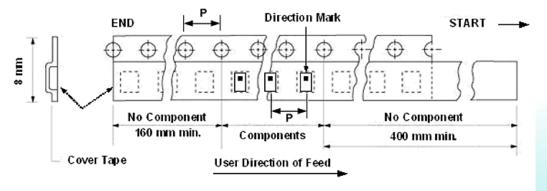
ТҮРЕ	A	В	С	D	E	F
8 mm	178±1	60+0.5 -0	-	13±0.2	9±0.5	12±0.5
12 mm	178±0.3	60±0.2	19.3±0.1	13.5±0.1	13.6±0.1	-

RóHS

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#### **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



P= 4 mm

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		<b>REVISION HISTORY</b>	
Revision	Date	Description	
Version 1	Apr. 13, 2022	- New issue	

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