

Description: 2012 LB/ JB-MB/ HB-n79 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

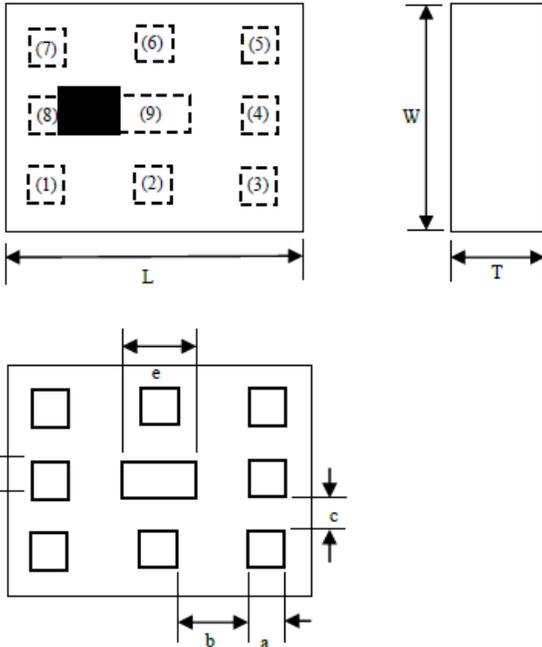
Power Capacity : 3W max.

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MECHANICAL DIMENSION

Outline



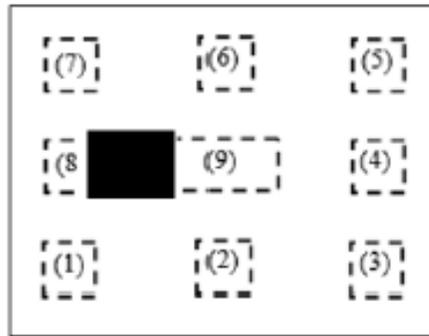
Dimension

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

NOTE : Dimensions in mm

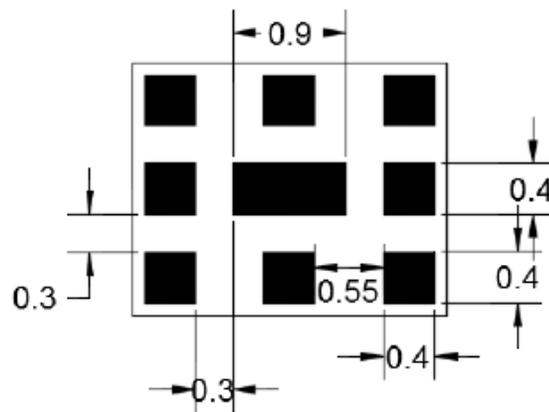
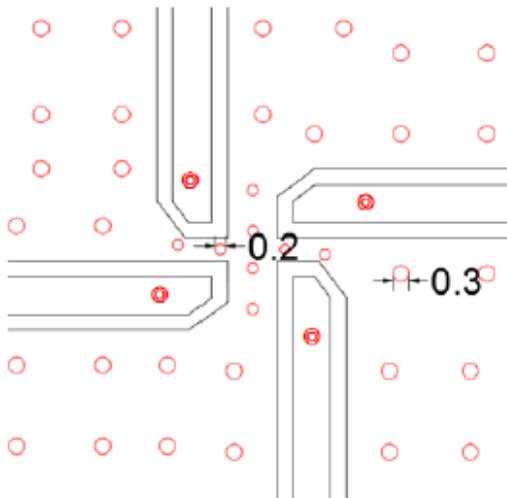
Termination

Top View



Terminal name	Dimension
P1	High band
P2	GND
P3	Middle band
P4	GND
P5	Low band
P6	GND
P7	Common
P8	GND
P9	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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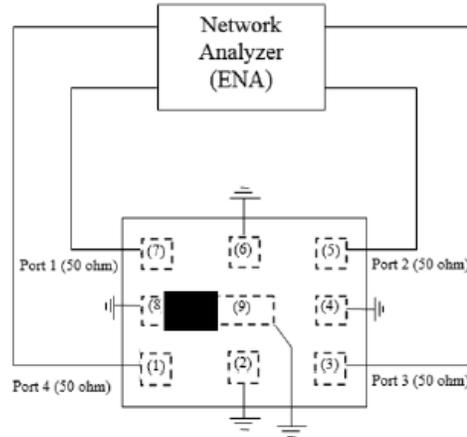
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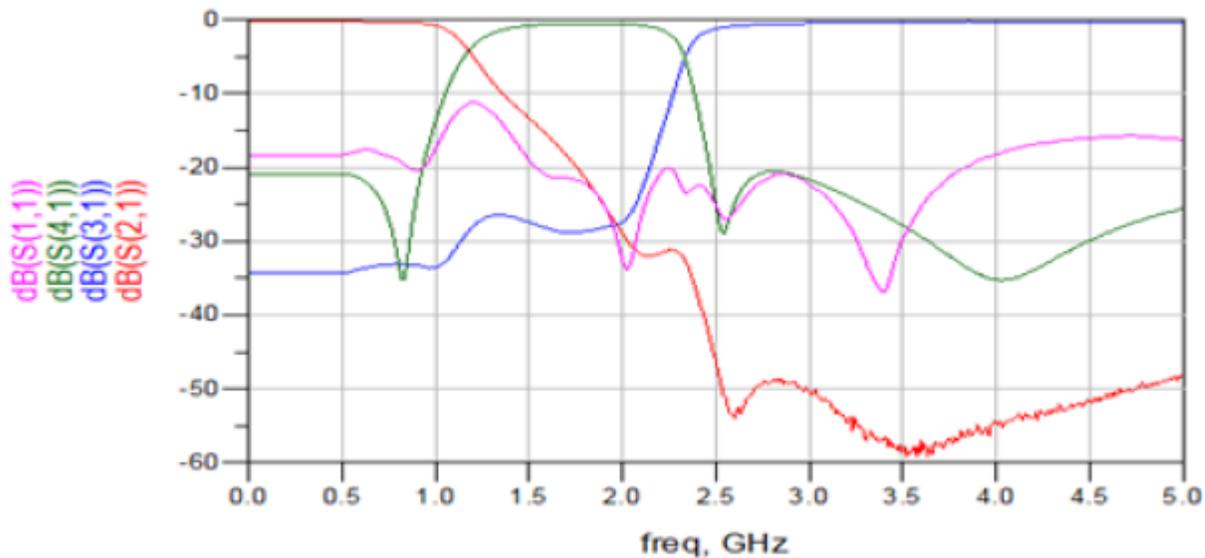
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MEASURING DIAGRAM



Test Instrument :
Agilent E5071A Network
Analyzer.

ELECTRICAL PERFORMANCES



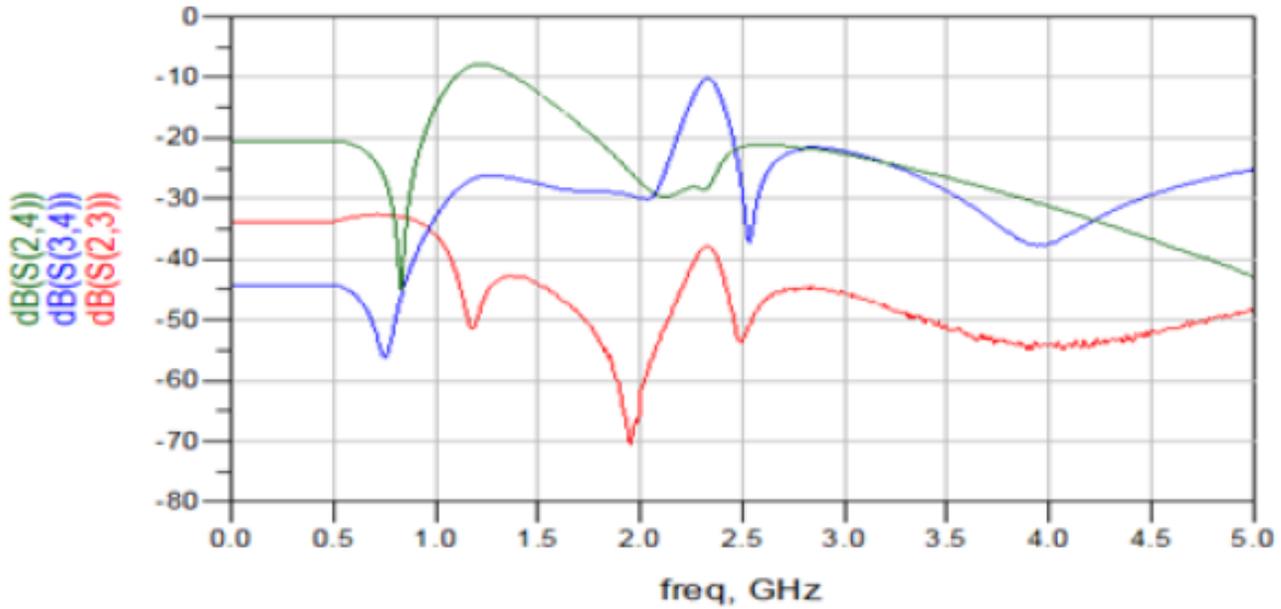
- Measured on Agilent E5071C Network Analyzer

Frequency Characteristics

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ELECTRICAL PERFORMANCES



- Measured on Agilent E5071C Network Analyzer

Frequency Characteristics

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REVISION HISTORY

Revision	Date	Description
Version 1	Apr. 13, 2022	- New issue