

Description: 2520 LB/JB-HB/n78-5GHz Triplexer

PART NUMBER: TPX2520LKTAR0924L

Features:

- Compact Size
- Low loss
- High Soldering Heat Resistance

Applications:

- For LTE/NR application

ELECTRICAL SPECIFICATIONS

Low band

Item	Frequency Range (GHz)	Min.	Typ.	Max.
Insertion loss (dB)	0.5~0.798	-	0.45	0.65
	0.815~0.894	-	0.55	0.70
	0.88~0.915	-	0.59	0.75
	0.915~0.96	-	0.71	0.95
Return loss (dB)	0.5~0.96	10	18	-
Attenuation (dB)	1.427~2.69	12	14	-
	1.575~1.61	22	24	-
	3.3~3.4	40	46	-
	3.4~3.8	40	48	-
	3.8~4.2	40	50	-
	4.4~5.0	40	46	-
	5.15~5.925	35	41	-

Middle band

Item	Frequency Range (GHz)	Min.	Typ.	Max.
Insertion loss (dB)	1.427~1.511	-	1.15	1.45
	1.71~1.88	-	0.67	1.00
	1.88~1.92	-	0.60	0.95
	1.93~2.2	-	0.59	0.95
	2.3~2.4	-	0.71	1.00
	2.496~2.69	-	1.12	1.45
Return loss (dB)	1.427~2.69	10	13	-
Attenuation (dB)	0.5~0.96	18	20	-
	3.3~3.4	20	23	-
	3.4~3.8	23	25	-
	3.8~4.2	30	33	-
	4.5~5.0	30	33	-
	5.15~5.925	27	30	-

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 (GHz)	Min.	Typ.	Max.
Insertion loss (dB)	3.3~3.4	-	0.73	0.95
	3.4~3.6	-	0.61	0.85
	3.6~3.8	-	0.53	0.80
	3.8~4.2	-	0.52	0.70
	4.4~5.0	-	0.49	0.70
	5.15~5.925	-	0.67	0.85
Return loss (dB)	3.3~5.925	10	15	-
Attenuation (dB)	0.5~0.96	19	21	-
	1.427~2.69	15	17	-
	10.3~11.85	19	22	-

Common

Item	Frequency Range (GHz)	Min.	Typ.	Max.
Return loss (dB)	0.5~0.96	10	18	-
	1.427~2.69	10	13	-
	3.3~5.925	10	15	-

Isolation

Item	Frequency Range (GHz)	Min.	Typ.	Max.
Low to Middle band (dB)	0.5~0.96	19	21	-
	1.427~2.69	10	13	-
	3.3~5.925	25	27	-
Middle to High band (dB)	0.5~0.96	35	40	-
	1.427~2.69	15	18	-
	3.3~5.925	21	23	-
Low to High band (dB)	0.5~0.96	19	21	-
	1.427~2.69	30	32	-
	3.3~5.925	35	42	-

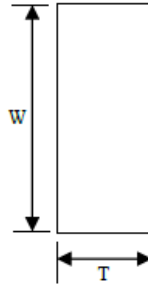
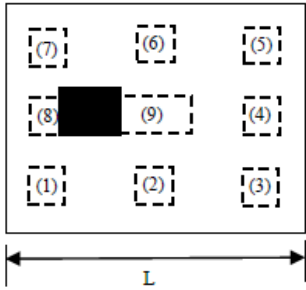
Operating Temperature Range : -40~85°C
Power Capacity : 3W max.

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MECHANICAL DIMENSION

Outline



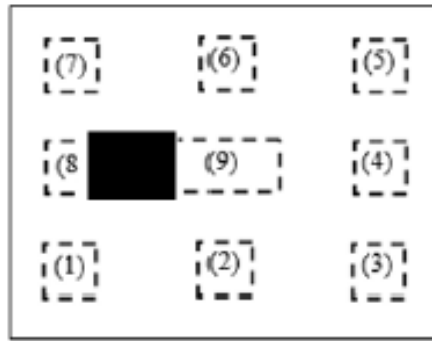
Dimension

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

NOTE : Dimensions in mm.

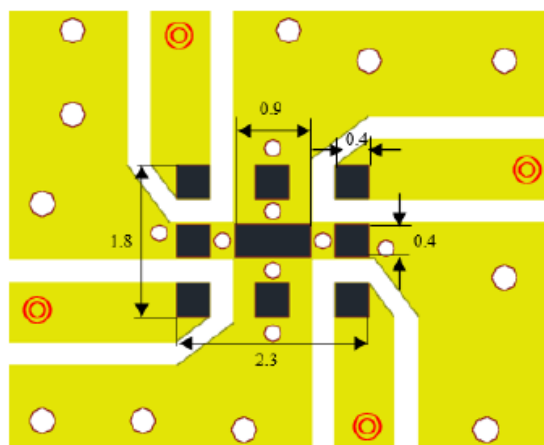
Termination

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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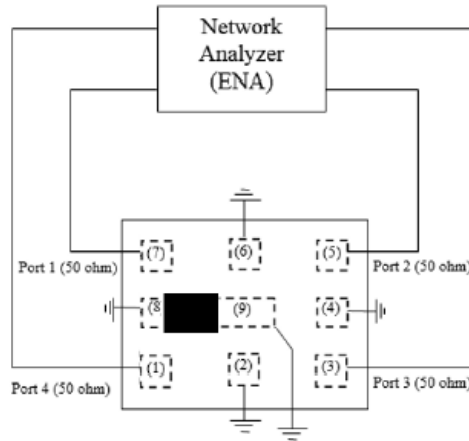
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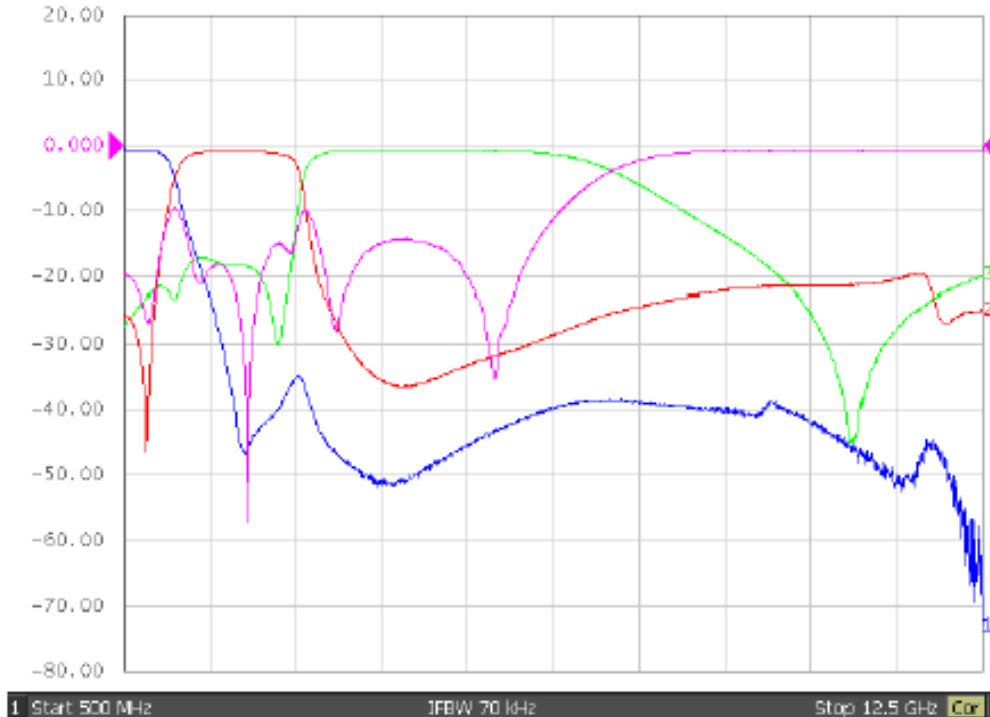
MEASURING DIAGRAM



Test Instrument :
Agilent E5071A Network Analyzer.

ELECTRICAL PERFORMANCES

Tr1 S21 Log Mag 10.00dB/ Ref 0.000dB [F4]
 Tr2 S31 Log Mag 10.00dB/ Ref 0.000dB [F4]
 Tr3 S41 Log Mag 10.00dB/ Ref 0.000dB [F4]
 Tr4 S11 Log Mag 10.00dB/ Ref 0.000dB [F4]



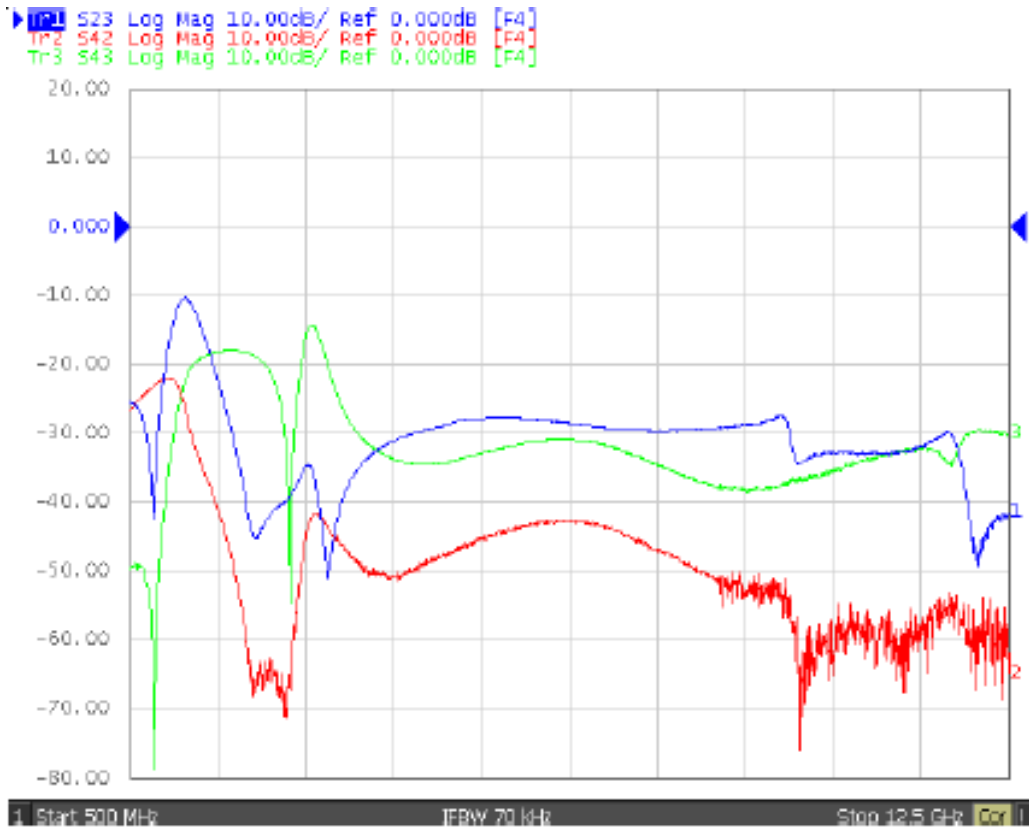
• Measured on Agilent E5071C Network Analyzer

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	Mar. 10, 2022	- New issue