

Description: 2012 LTE/n78/n79 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.	Typ.	Max.
Insertion loss (dB)	617~1990	-	0.53	0.8
	2300~2496	-	0.68	0.9
	2496~2690	-	1.1	1.35
Return loss (dB)	617~2690	10	14.1	-
Attenuation (dB)	3300~3700	15	17.2	-
	3700~3800	15	17	-
	3800~4200	15	17	-
	4400~5000	25	35.1	-
	5150~5925	25	42.8	-
	5925~12750	10	18	-

Middle band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	3300~3800	-	1.07	1.35
Return loss (dB)	3300~3800	10	16.5	-
Attenuation (dB)	617~2690	12	13.8	-
	4400~5000	14	15.3	-

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

Common

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

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ELECTRICAL SPECIFICATIONS

Isolation

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

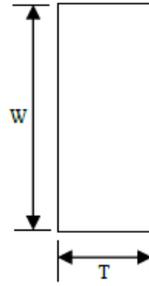
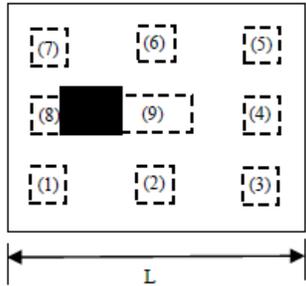
Power Capacity : 3W max.

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MECHANICAL DIMENSION

Outline



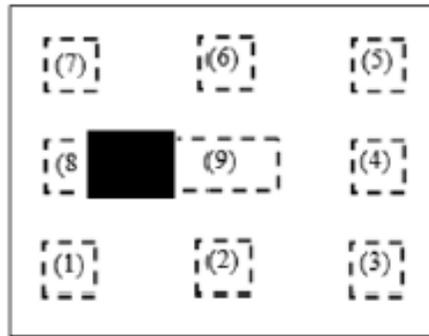
Dimension

L	W	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.

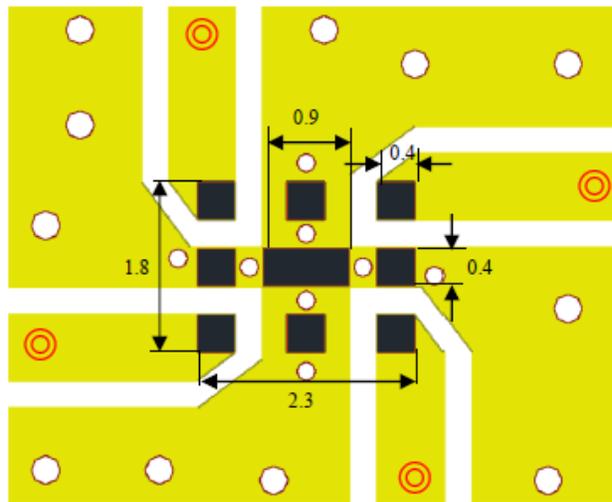
Termination

Top View



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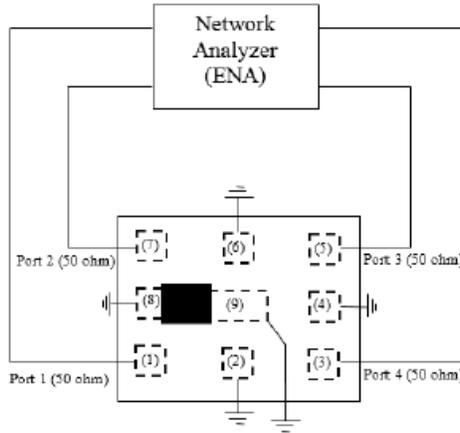
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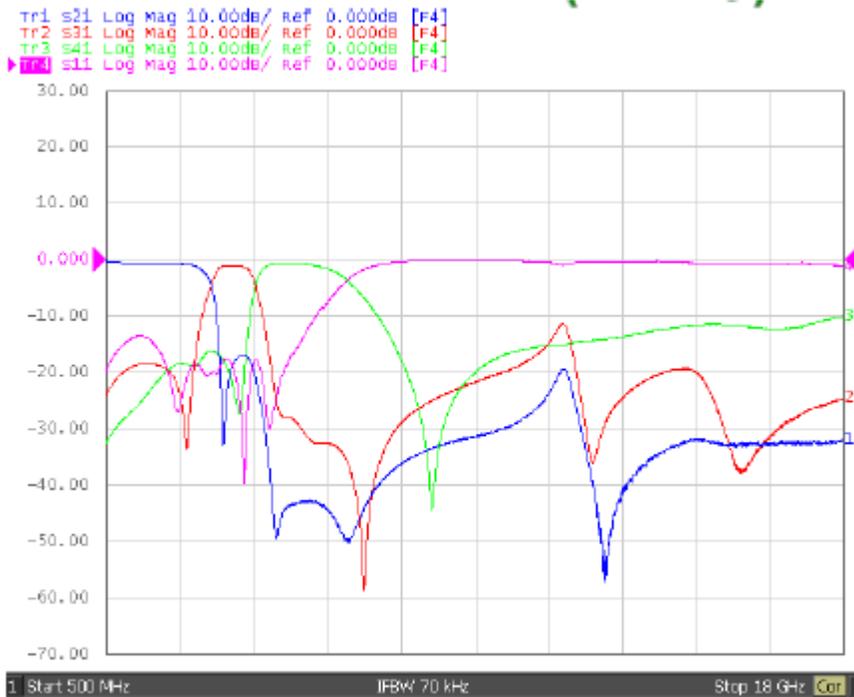
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MEASURING DIAGRAM



Test Instrument :
Agilent E5071A Network
Analyzer.

ELECTRICAL PERFORMANCES



- Measured on Agilent E5071C Network Analyzer

Frequency Characteristics

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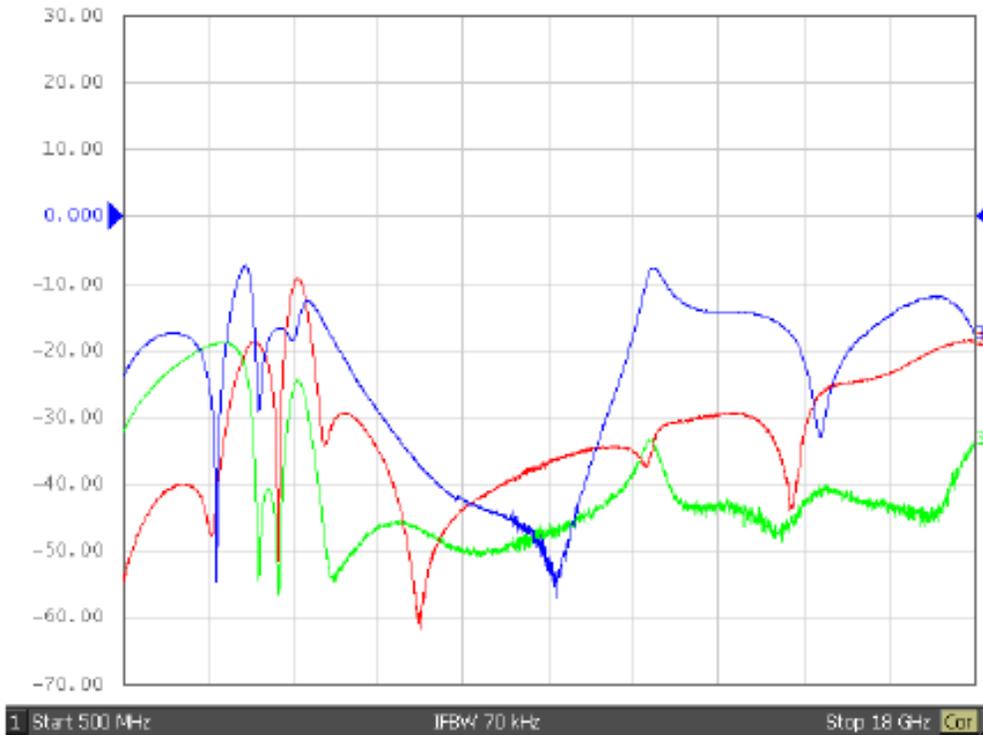
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ELECTRICAL PERFORMANCES

S23 Log Mag 10.00dB/ Ref 0.000dB [F4]
 S34 Log Mag 10.00dB/ Ref 0.000dB [F4]
 S42 Log Mag 10.00dB/ Ref 0.000dB [F4]



- Measured on Agilent E5071C Network Analyzer

Frequency Characteristics

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REVISION HISTORY

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