

**Description**: 2012 Triplexer

PART NUMBER: TPX2012LKTFR1525L

### **Features:**

- Compact size
- Low loss
- · High Soldering Heat Resistance

# **Applications:**

- WiFi
- GPS

### **ELECTRICAL SPECIFICATIONS**

#### Low band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion loss (dB)	1559~1606	-	0.56	0.7
Return loss (dB)	1559~1606	10	20.4	-
Attanuation (dP)	2400~2500	18	29.09	-
Attenuation (dB)	4900~5950	20	22.59	-

#### Middle band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion loss (dB)	2400~2500	-	0.82	0.9
Return loss (dB)	2400~2500	10	19.1	-
Attenuation (dB)	1560~1606	25	31.3	-
	4800~5000	30	35.3	-
	7200~7500	20	29.3	-

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



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## **ELECTRICAL SPECIFICATIONS**

High band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Incortion loss (dP)	4900~5100	-	0.88	1.2
Insertion loss (dB)	5150~5950	- 0.8 0.9 10 18.4 - 32 38.7 -		
Return loss (dB)	4900~5950	10	18.4	-
Attenuation (dB)	2400~2500	32	38.7	-
	6900~7200	3	4.4	-
	7300~7800	7	7.8	-
	10300~11700	20	24	-
	15300~16200	15	17.5	-

#### Common

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	1559~1606	10	20.4	-
Return loss (dB)	2400~2500	10	19.1	-
	4900~5950	10	18.4	-

### **Isolation**

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Low to Middle band (dB)	1559~1606	25	28	-
Low to ivildule barid (db)	2400~2500	18	28.2	-
Middle to High band (dB)	2400~2500	30	36.3	-
	5150~5950	25	32.4	
Low to High band (dP)	1559~1606	30	42	•
Low to High band (dB)	5150~5950	15	24.7	•

Operating Temperature Range: -40~85°C

Power Capacity: 3W max.



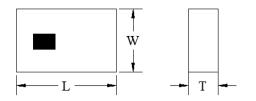


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## **MECHANICAL DIMENSION**

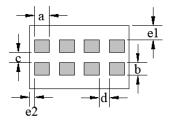
## **Outline**



## **Dimension**

L	W	Т	а
2.00±0.15	1.25±0.15	0.75 max.	0.30±0.10
b	С	d	e1
0.25±0.10	0.20±0.10	0.20±0.10	0.275±0.10
e2			
0.10±0.10			

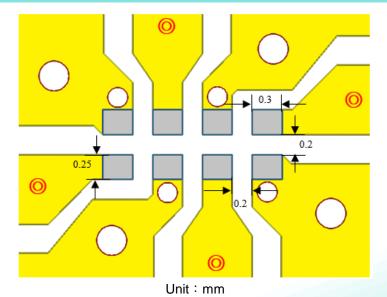
NOTE: Dimensions in mm.



<u>T</u>	erm Top \		<u>ion</u>
8	7	<u>(6)</u>	(5)
1	2	3	4

Function
Low band
GND
Common
GND
Middle Band
GND
High band
GND

# Reference design of EVB



 $^{\circ}$ Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

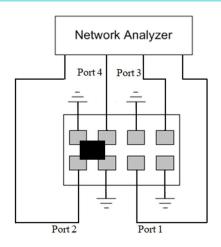




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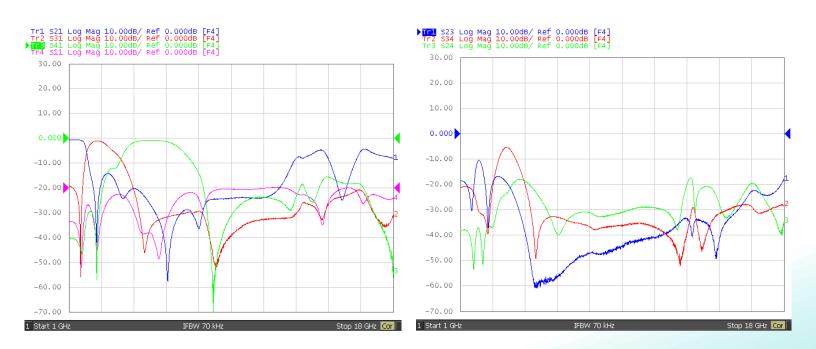
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### **MEASURING DIAGRAM**



Test Instrument:
Agilent E5071C Network Analyzer or equivalent.

### **ELECTRICAL PERFORMANCES**







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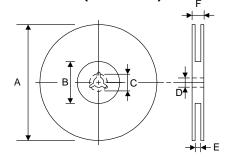
# **PACKING SPECIFICATION**

#### Peel-off force



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

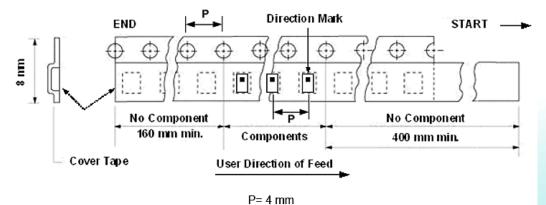
### **Dimension (Unit: mm)**



TYPE	A	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	-

### **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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