

**Description**: 2012 LTE & n77-5GHz Diplexer

PART NUMBER: DPX2012LKUCRWH46L

### Features:

- Compact size : 2.00x1.20x0.6mm
- Low loss: Low insertion loss, high attenuation.

# **Applications:**

GSM/WCDMA/LTE mobile communication systems

ELECTRICAL SPECIFICATIONS	3
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DESCRIPTION	VALUE		
Pass Band	Low Band 617~960MHz 1427~1511MHz 1710~2170MHz 2300~2496MHz 2496~2690MHz	High Band  3300~3400MHz 3400~4200MHz 4400~5000MHz 5150~5925MHz	
Insertion loss (Max)	0.35 / 0.45 / 0.55 / 0.75 / 0.95 dB	1.4 / 1.1 / 0.7 / 0.55 dB	
Return Loss(Min)	17.5dB (typ.) /12dB (Min)	19dB (typ.) /12dB (Min)	
Attenuation (Min)	20dB(typ.)/17dB@3300~3400MHz 26dB(typ.)/23dB@3400~4200MHz 26dB(typ.)/23dB@4400~5000MHz 33dB(typ.)/28dB@5150~5925MHz	36.8dB(typ.)/30dB@617~960MHz 35.5dB(typ.)/30dB@1427~1511MHz 27.3dB(typ.)/25dB@1710~2170MHz 27dB(typ.)/22dB@2170~2690MHz 27dB(typ.)/22dB@10300~11850MHz 23.5dB(typ.)/10dB@15450~17775MHz	
Isolation (Min)	36dB(typ.)/30dB@617~960MHz 34.5dB(typ.)/30dB@1427~1511MHz 27.7dB(typ.)/23dB@1710~2170MHz 28dB(typ.)/23dB@2170~2690MHz 21dB(typ.)/18dB@3300~3400MHz 28.1dB(typ.)/23dB@3400~3800MHz 26.6dB(typ.)/23dB@3800~4200MHz 27.5dB(typ.)/23dB@4400~5000MHz 32.9dB(typ.)/28dB@5150~5925MHz		
Operating Temperature	-40 ~ +85°C		

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

ROHS

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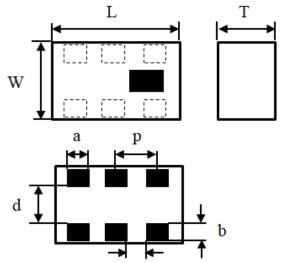


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### **MECHANICAL DIMENSION**

## **Outline**



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# **Termination**

Termin	al na	me	Function
P1			GND
P2			Common
P3			GND
P4			High band
P5			GND
P6			Low band
	<b>(B</b> )	⑤	4

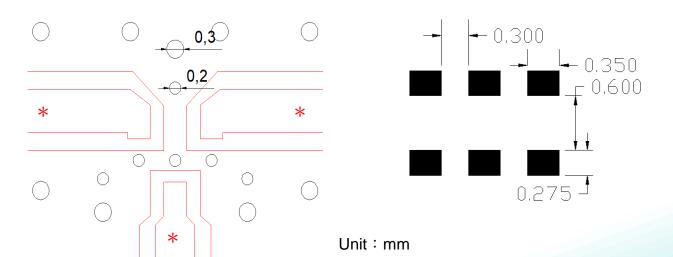
# **Mechanical**

	Dimension
L (mm)	2.00±0.10
W (mm)	1.25±0.10
T (mm)	0.6 (Max.)
a (mm)	$0.35 \pm 0.10$
b (mm)	$0.275 \pm 0.10$
c (mm)	$0.30 \pm 0.15$
d (mm)	$0.60 \pm 0.10$
p (mm)	$0.65 \pm 0.10$

### **Recommended Land Pattern**

(2)

(3)



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

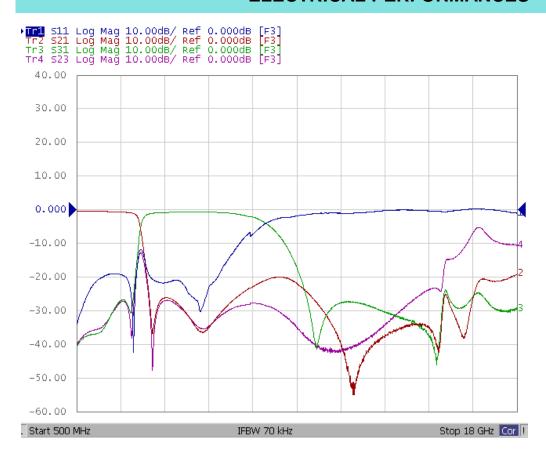




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### **ELECTRICAL PERFORMANCES**



- Measured on Agilent E5071C Network Analyzer
- Common port : Port 1 (Return loss : S11)
- Low band port : Port 2 (Low band Insertion loss S21, and attenuation at high band)
- High band port: Port 3 (High band Insertion loss S31, and attenuation at low band)
- Low band and high band Isolation : \$23

Frequency Characteristics



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REVISION HISTORY						
Revision	Date	Description				
Version 1	Nov. 10, 2021	- New issue				