



## Dual Band Diplexer

Part Number : LFD182G45PJ4F520

### 1. Maximum Ratings

	Ratings	Conditions
Operating Temperature	-40 ~ +85 °C	
Power Capacity	1.5W	50Ω Load

### 2. Electrical Characteristics ( at -40 ~ +85 °C )

#### ■ Low Band

Item		Frequency (MHz)	SPEC			Unit
			Min.	Typ.(+25°C)	Max.	
Insertion Loss	at +25°C	2400.00 ~ 2500.00	-	0.47	0.60	dB
	at -40~+85°C	2400.00 ~ 2500.00	-	0.47	0.70	dB
Return Loss		2400.00 ~ 2500.00	12.0	22.4	-	dB
Attenuation (Absolute value)		4800.00 ~ 5000.00	32.0	41.5	-	dB
		7200.00 ~ 7500.00	25.0	34.8	-	dB

#### ■ High Band

Item		Frequency (MHz)	SPEC			Unit
			Min.	Typ.(+25°C)	Max.	
Insertion Loss	at +25°C	5170.00 ~ 7125.00	-	0.64	0.95	dB
	at -40~+85°C	5170.00 ~ 7125.00	-	0.64	1.10	dB
Return Loss		5170.00 ~ 7125.00	10.0	17.9	-	dB
Attenuation (Absolute value)		2400.00 ~ 2500.00	25.0	36.6	-	dB
		10340.00 ~ 14250.00	25.0	41.5	-	dB
		15510.00 ~ 21375.00	19.5	28.4	-	dB

#### ■ Common

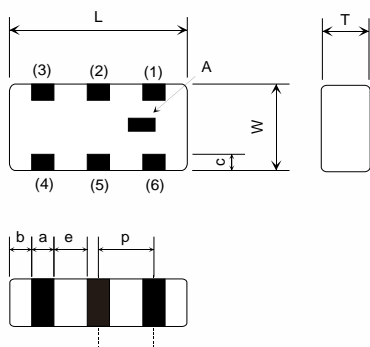
Item	Frequency (MHz)	SPEC			Unit
		Min.	Typ.(+25°C)	Max.	
Return Loss	2400.00 ~ 2500.00	12.0	19.1	-	dB
	5170.00 ~ 7125.00	10.0	16.2	-	dB

#### ■ Isolation

Item	Frequency (MHz)	SPEC			Unit
		Min.	Typ.(+25°C)	Max.	
Isolation LB-HB	2400.00 ~ 2500.00	25.0	36.1	-	dB
	5170.00 ~ 7125.00	30.0	37.1	-	dB



### 3. Construction, Dimensions & Marking

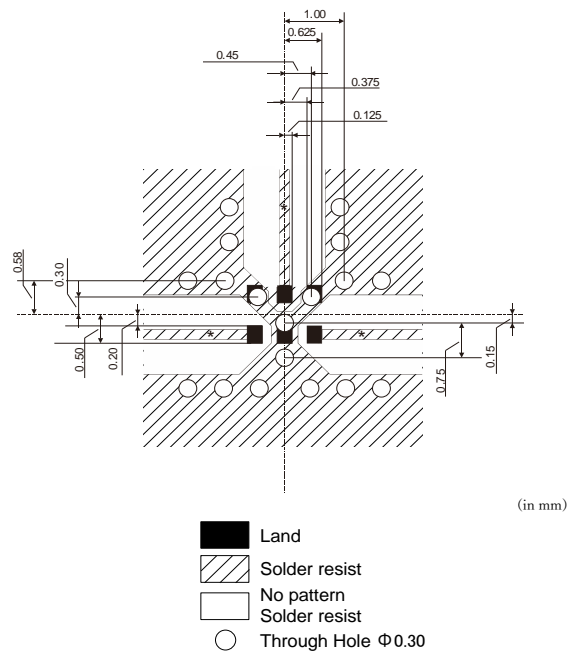


Mark	Meaning				
A	Directional Input Mark				
(in mm)					
Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 +/- 0.1	a	0.2 +/- 0.1	e	0.3 +/- 0.1
W	0.8 +/- 0.1	b	0.20 +/- 0.15	p	0.50 +/- 0.05
T	0.65 max.	c	0.15 +/- 0.10	-	-

#### TERMINAL CONFIGURATION

Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(4)	P1:Low Band Port
(2)	P3:Common Port	(5)	GND
(3)	GND	(6)	P2:High Band Port

### 4. Land Pattern



\* Line width to be designed to match 50Ω characteristic impedance,  
Depending on PCB material and thickness.



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