



Product Specification

Chip Multilayer Diplexer
WiFi 2G/5-7G

for 2400-2500 / 5170-7125 MHz

size : 1.6x0.8mm

P/N : LFD182G45PJ2F489



Part Number : LFD182G45PJ2F489

1. General information

Operating Temperature	-40 ~ +85 °C
Power Capacity	1.5W 50Ω Load
RoHS compliance	YES (RoHS-Y)
MSL	1

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	20.1	-	dB	
Attenuation (Absolute value)	4800.00 ~ 5000.00	32.0	40.7	-	dB	
	7200.00 ~ 7500.00	25.0	34.7	-	dB	

■ High Band

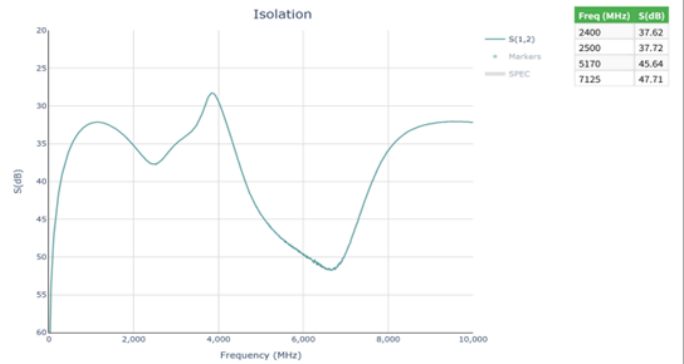
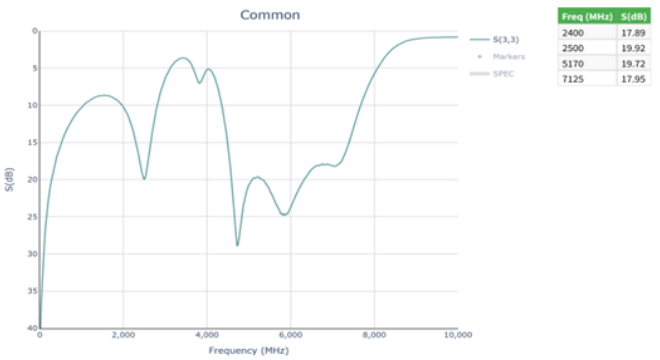
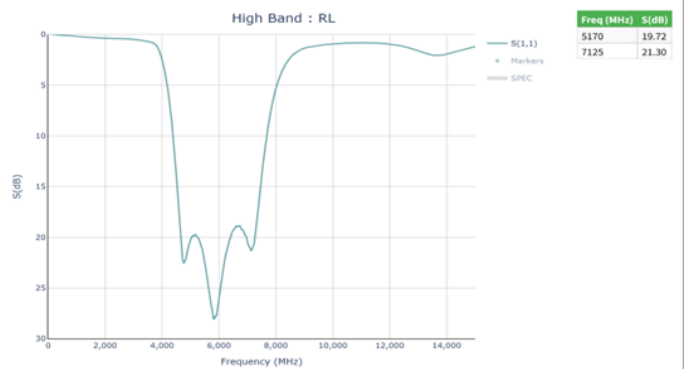
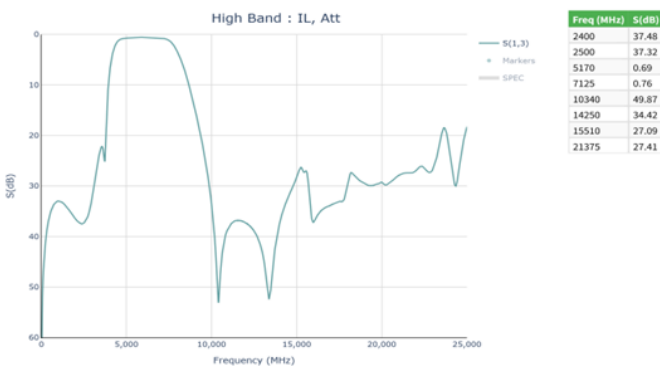
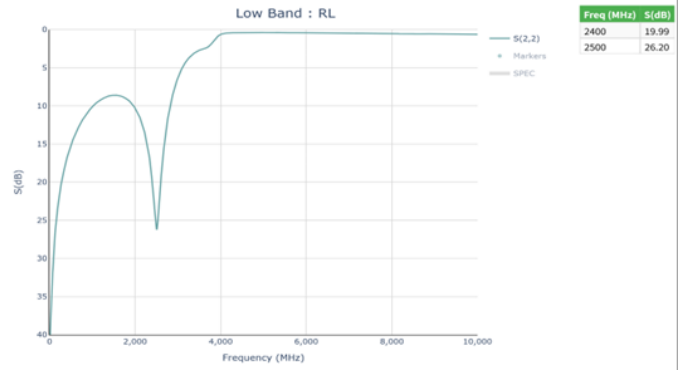
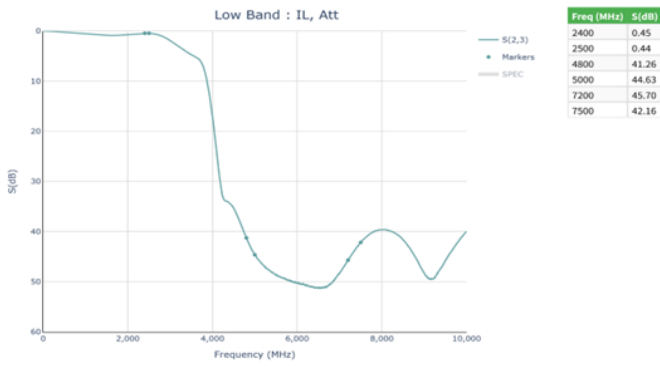
Item	Frequency (MHz)	SPEC			Unit	
		Min.	Typ.(+25°C)	Max.		
Insertion Loss	at +25°C	5170.00 ~ 7125.00	-	0.77	0.95	dB
	at -40~+85°C	5170.00 ~ 7125.00	-	0.77	1.10	dB
Return Loss	5170.00 ~ 7125.00	10.0	13.6	-	dB	
Attenuation (Absolute value)	2400.00 ~ 2500.00	25.0	36.8	-	dB	
	10340.00 ~ 14250.00	25.0	32.7	-	dB	
	15510.00 ~ 21375.00	19.5	27.3	-	dB	

■ Common

Item	Frequency (MHz)	SPEC			Unit
		Min.	Typ.(+25°C)	Max.	
Return Loss	2400.00 ~ 2500.00	12.0	17.7	-	dB
	5170.00 ~ 7125.00	10.0	13.5	-	dB

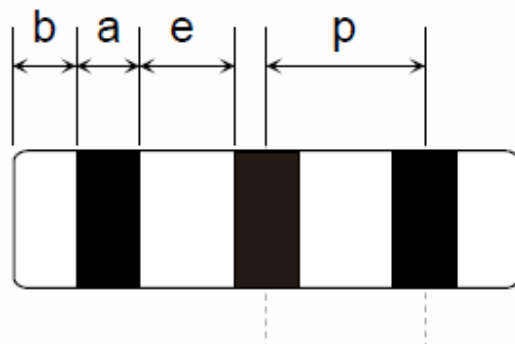
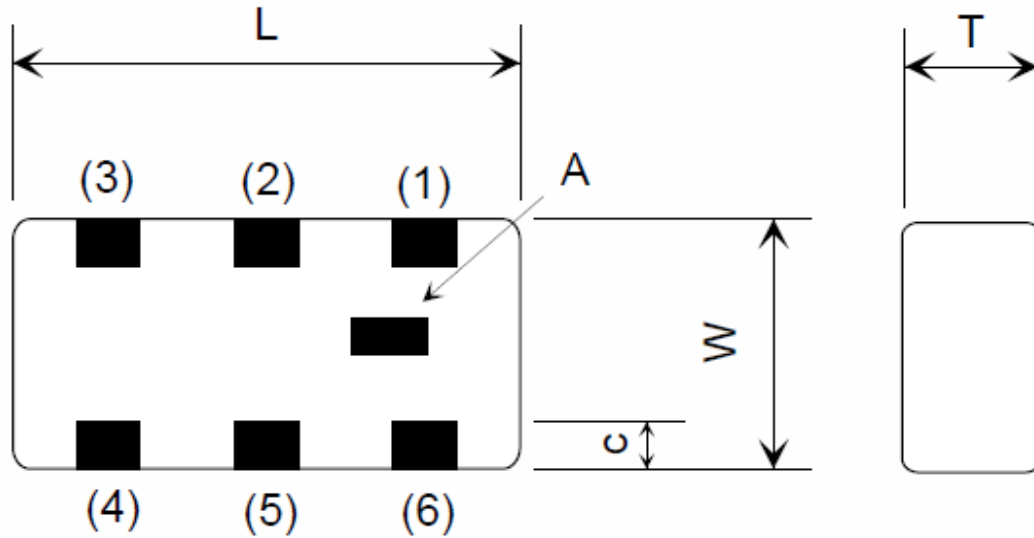
■ Isolation

Item	Frequency (MHz)	SPEC			Unit
		Min.	Typ.(+25°C)	Max.	
Isolation LB-HB	2400.00 ~ 2500.00	25.0	36.3	-	dB
	5170.00 ~ 7125.00	30.0	36.4	-	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

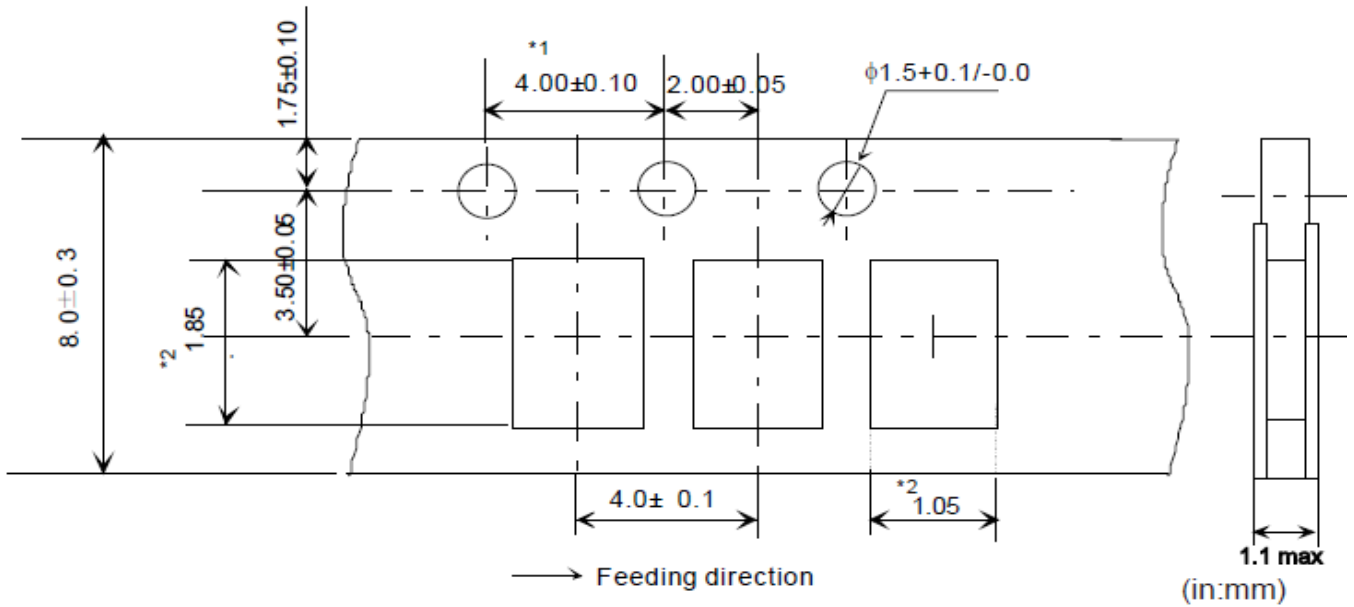
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(4)	P1:High Band Port
(2)	P3:Common Port	(5)	GND
(3)	GND	(6)	P2:Low Band Port



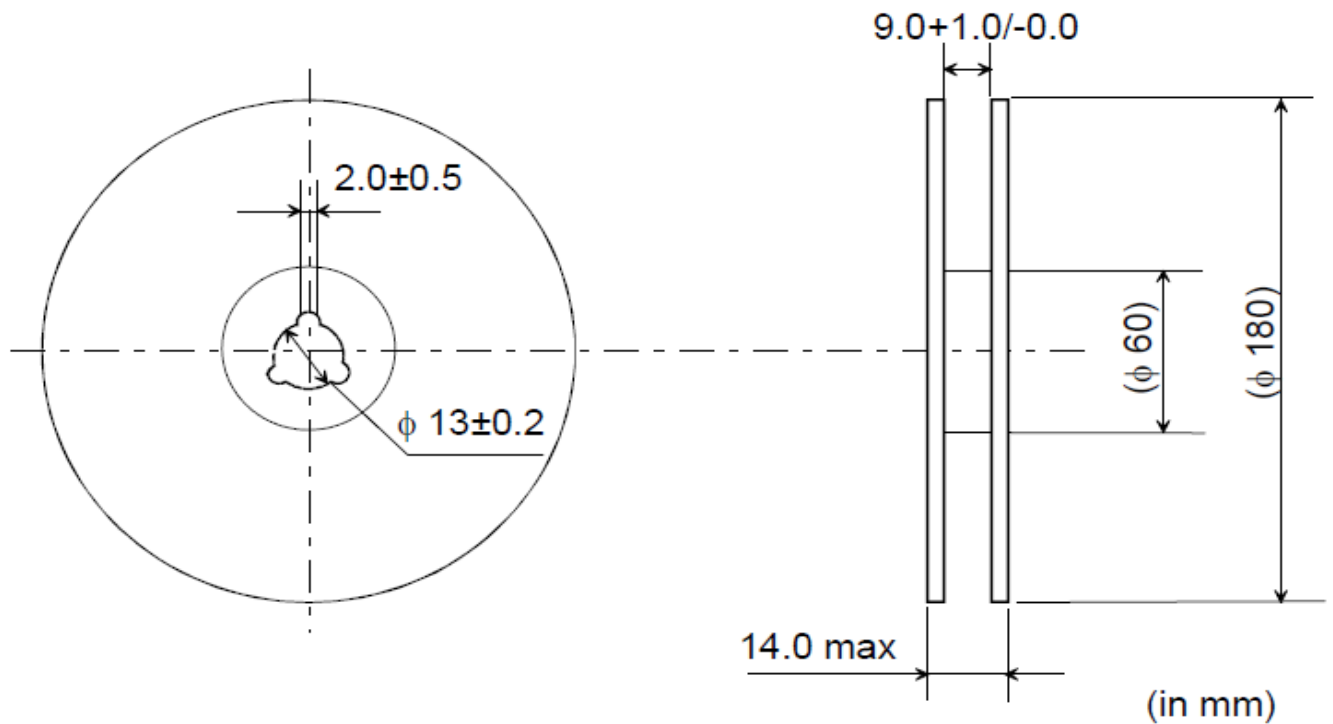
5. Tape and Reel Packing

(1) Dimensions of Tape (Paper tape)

- *1 Cumulative tolerance of max. ± 0.3 every 10 pitches
- *2 Reference value

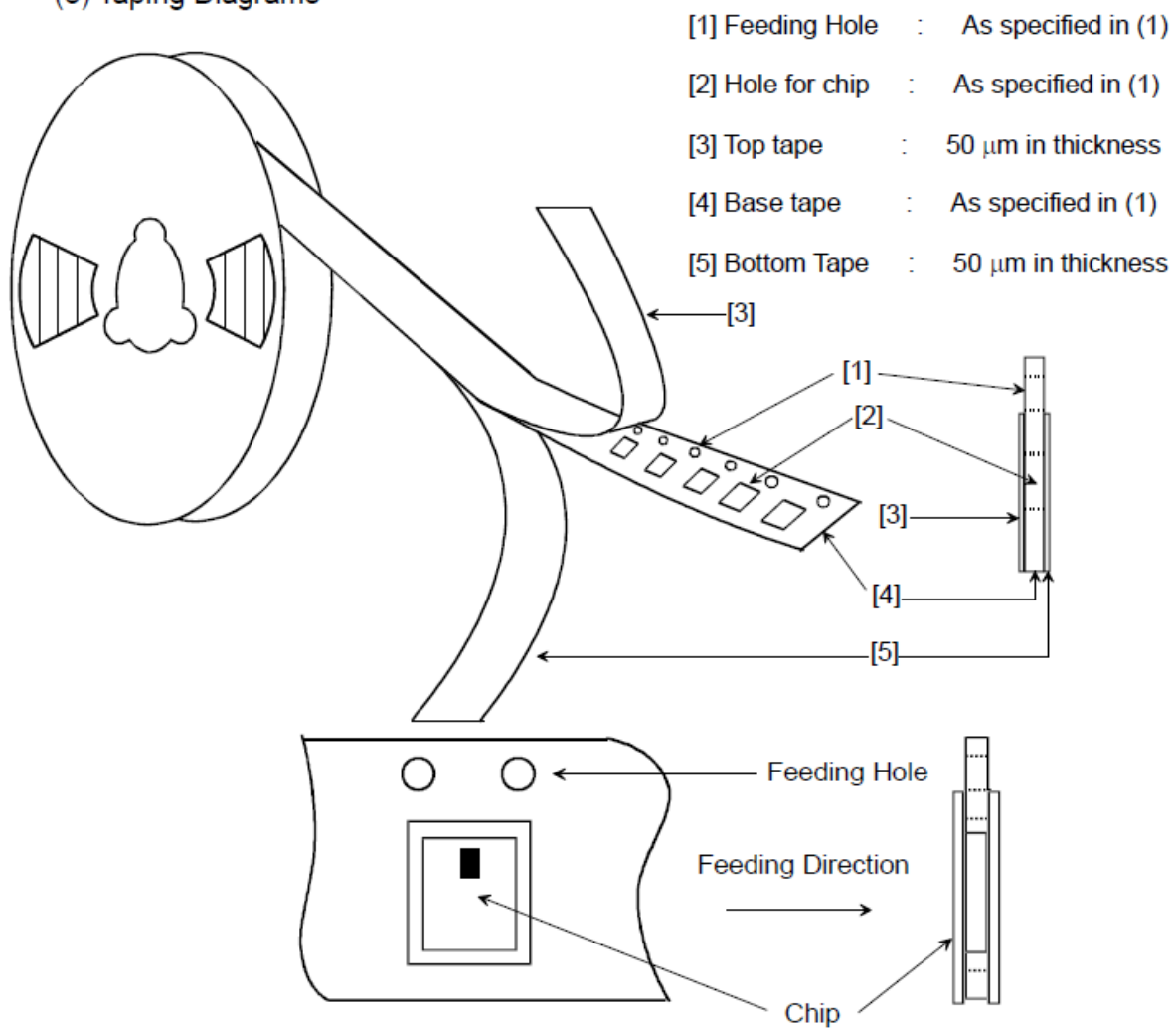


(2) Dimensions of Reel

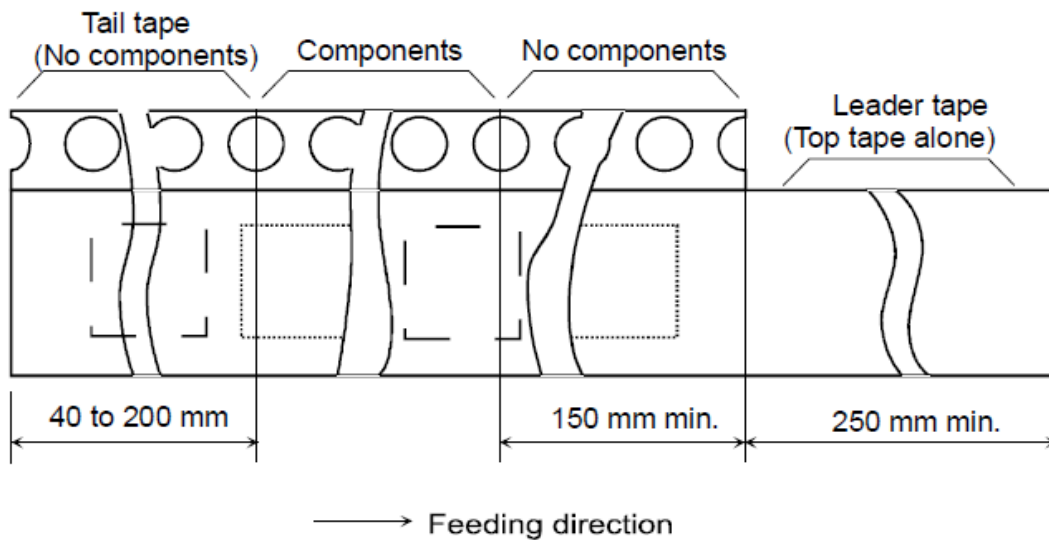




(3) Taping Diagrams



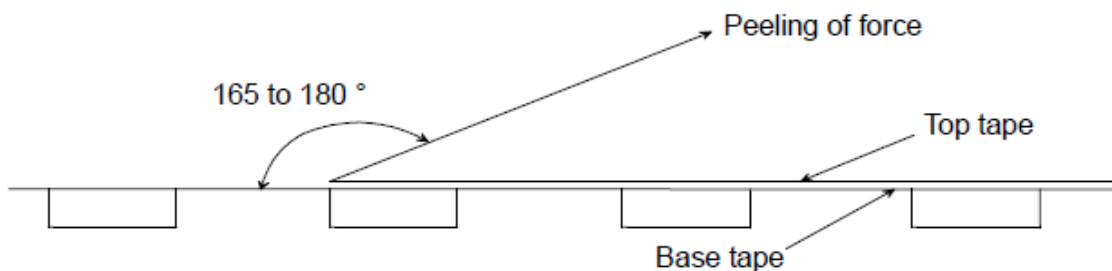
(4) Leader and Tail tape





- (5) The tape for chips are wound clockwise, the feeding holes to the right side as the tape is pulled toward the user.
- (6) The top tape and bottom tape shall not protrude the edges of the tape, and shall not cover sprocket holes.
- (7) The top tape and base tape are not adhered at no components area for 250 mm min.
- (8) Tear off strength against pulling of top tape and bottom tape : 5N min.
- (9) Packaging unit : 4000 pcs. / reel
- (10) Material : Base tapePaper
ReelPlastic
- (11) Peeling of force : in the direction of peeling as shown below.
Peeling speed : 300mm/min \pm 10mm/min

Tape width	Peeling of force (max)
8mm	1.0N
12-56mm	1.3N
72-200mm	1.5N





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Change History

Revision No.	Date	Comment
-	2022/6/27	Initial
A	2025/12/1	Updated Format