

Dual Band Diplexer

Part Number : **LFD182G45PACF673**

1. Maximum Ratings

	Ratings	Conditions
Operating Temperature	-40 ~ +85 °C	
Power Capacity	0.5W	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	-	0.38	0.63	dB
	at -40 ~ +85°C	2400.00 ~ 2500.00	-	0.38	0.78	dB
Return Loss		2400.00 ~ 2500.00	10.0	17.9	-	dB
Attenuation (Absolute value)		4800.00 ~ 5000.00	30.4	36.4	-	dB
		5150.00 ~ 7125.00	31.6	39.6	-	dB
		7200.00 ~ 7500.00	32.0	42.5	-	dB
		10300.00 ~ 14250.00	27.0	44.7	-	dB
		15450.00 ~ 21375.00	4.0	16.9	-	dB

■ High Band

Item		Frequency (MHz)	SPEC			Unit
			Min.	Typ.(+25°C)	Max.	
Insertion Loss	at +25°C	5150.00 ~ 5875.00	-	0.54	0.79	dB
	at -40 ~ +85°C	5150.00 ~ 5875.00	-	0.54	0.99	dB
	at +25°C	5875.00 ~ 7125.00	-	0.95	1.20	dB
	at -40 ~ +85°C	5875.00 ~ 7125.00	-	0.95	1.40	dB
Return Loss		5150.00 ~ 7125.00	5.0	12.1	-	dB
Attenuation (Absolute value)		300.00 ~ 1000.00	44.5	50.5	-	dB
		1000.00 ~ 2300.00	25.6	31.7	-	dB
		2400.00 ~ 2500.00	22.0	28.1	-	dB
		2700.00 ~ 3500.00	5.2	11.3	-	dB
		10300.00 ~ 11900.00	31.9	43.9	-	dB
		11900.00 ~ 14250.00	31.9	40.9	-	dB
		15450.00 ~ 17850.00	22.0	39.3	-	dB
		17850.00 ~ 21375.00	11.3	21.6	-	dB

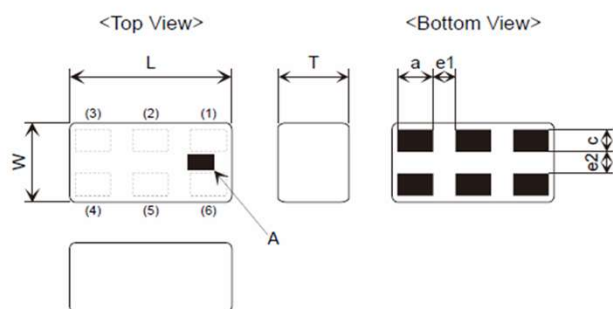
■ Common

Item		Frequency (MHz)	SPEC			Unit
			Min.	Typ.(+25°C)	Max.	
Return Loss		2400.00 ~ 2500.00	10.0	-	-	dB
		5150.00 ~ 7125.00	5.0	-	-	dB

■ Isolation

Item		Frequency (MHz)	SPEC			Unit
			Min.	Typ.(+25°C)	Max.	
Isolation LB-HB		4800.00 ~ 5000.00	32.6	40.6	-	dB
		5150.00 ~ 7125.00	32.5	40.6	-	dB
		7200.00 ~ 7500.00	34.5	42.6	-	dB
		10300.00 ~ 14250.00	30.0	55.2	-	dB
		15450.00 ~ 21375.00	13.7	25.8	-	dB

3. Construction, Dimensions & Marking



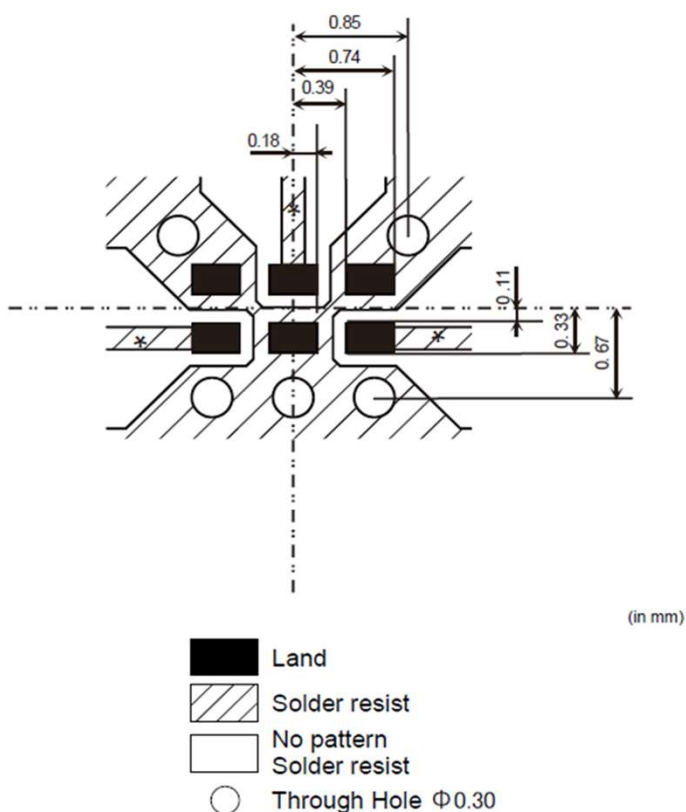
Mark	Meaning
A	Directional Input Mark

(in mm)					
Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 +/- 0.1	a	0.35 +/- 0.05	e1	0.22 +/- 0.05
W	0.8 +/- 0.1	c	0.225 +/- 0.050	e2	0.22 +/- 0.05
T	0.65 max	-	-	-	-

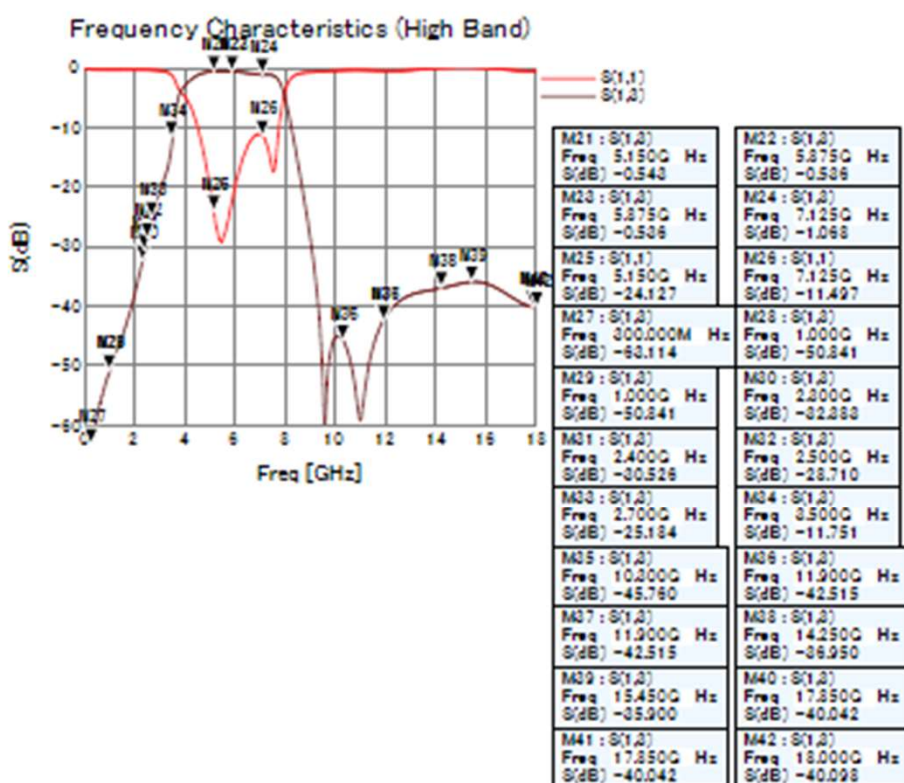
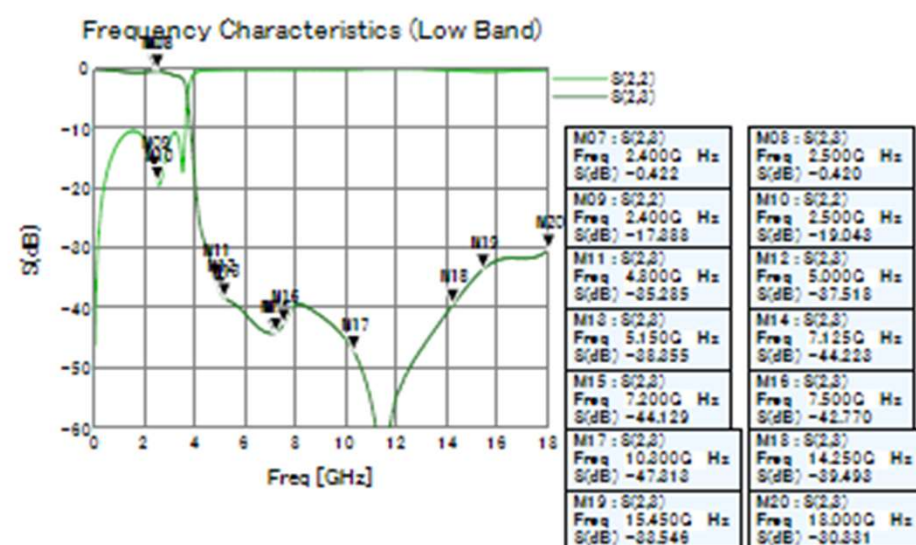
TERMINAL CONFIGURATION

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

4. Land Pattern



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



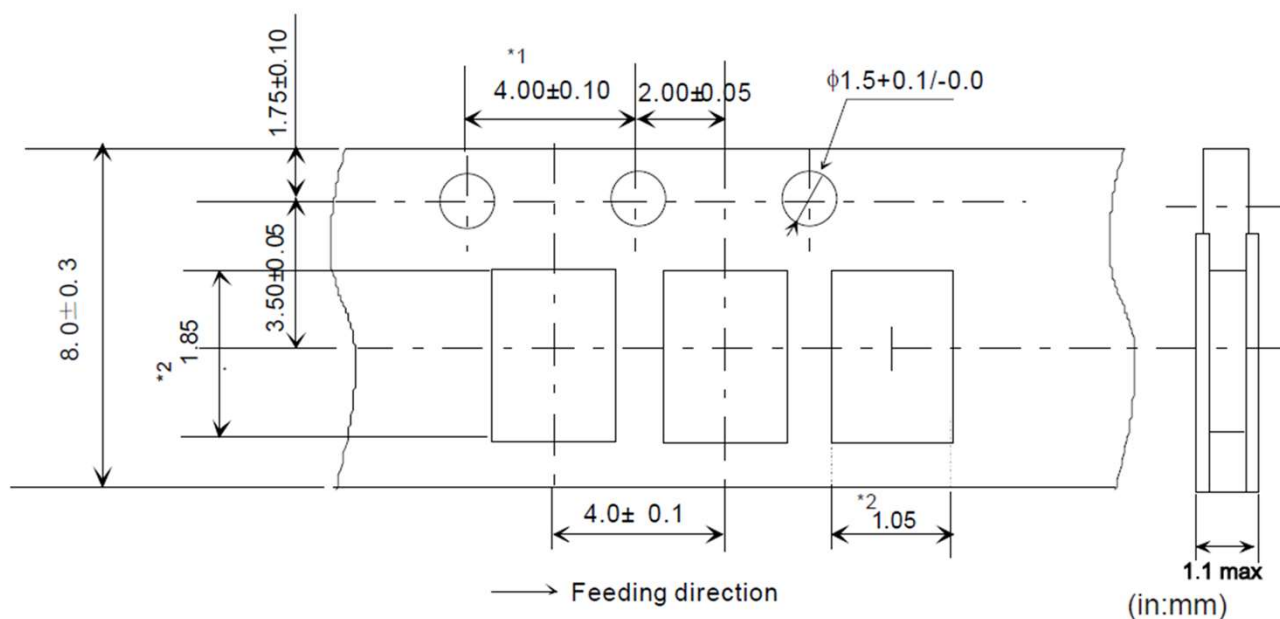


5. Tape and Reel Packing

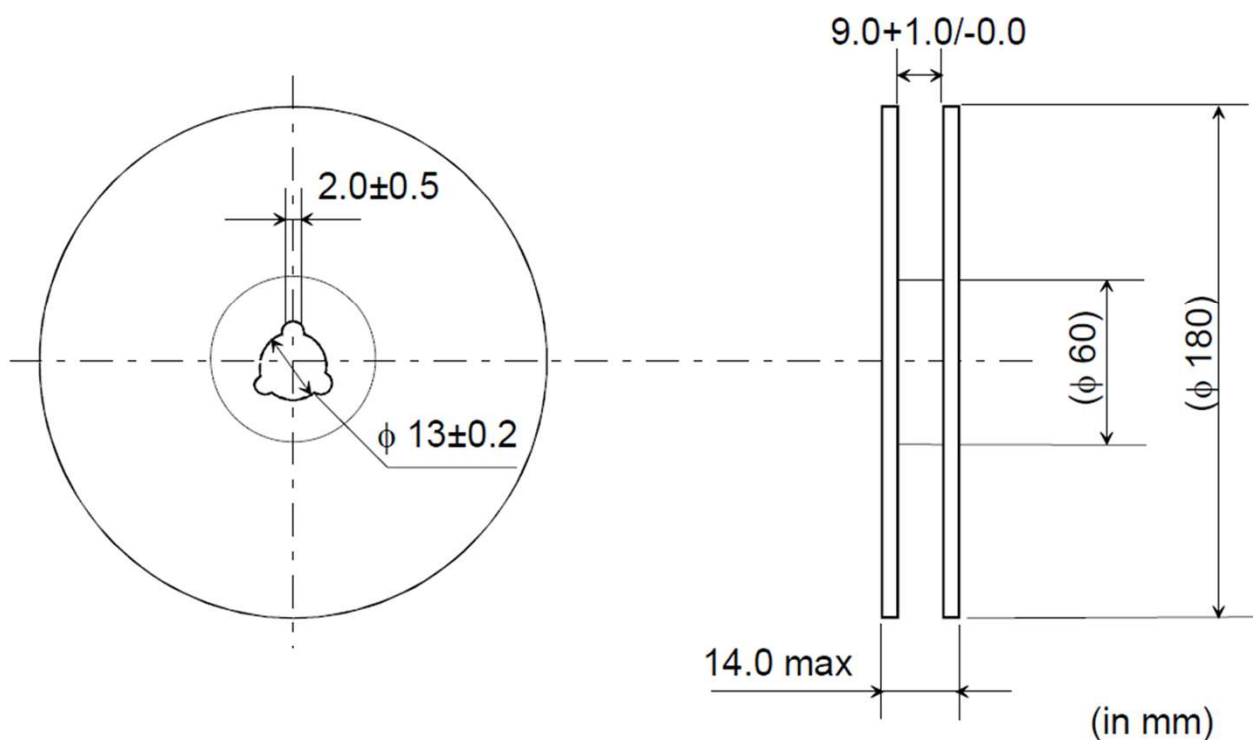
(1) Dimensions of Tape (Paper tape)

*1 Cumulative tolerance of max. ± 0.3 every 10 pitches

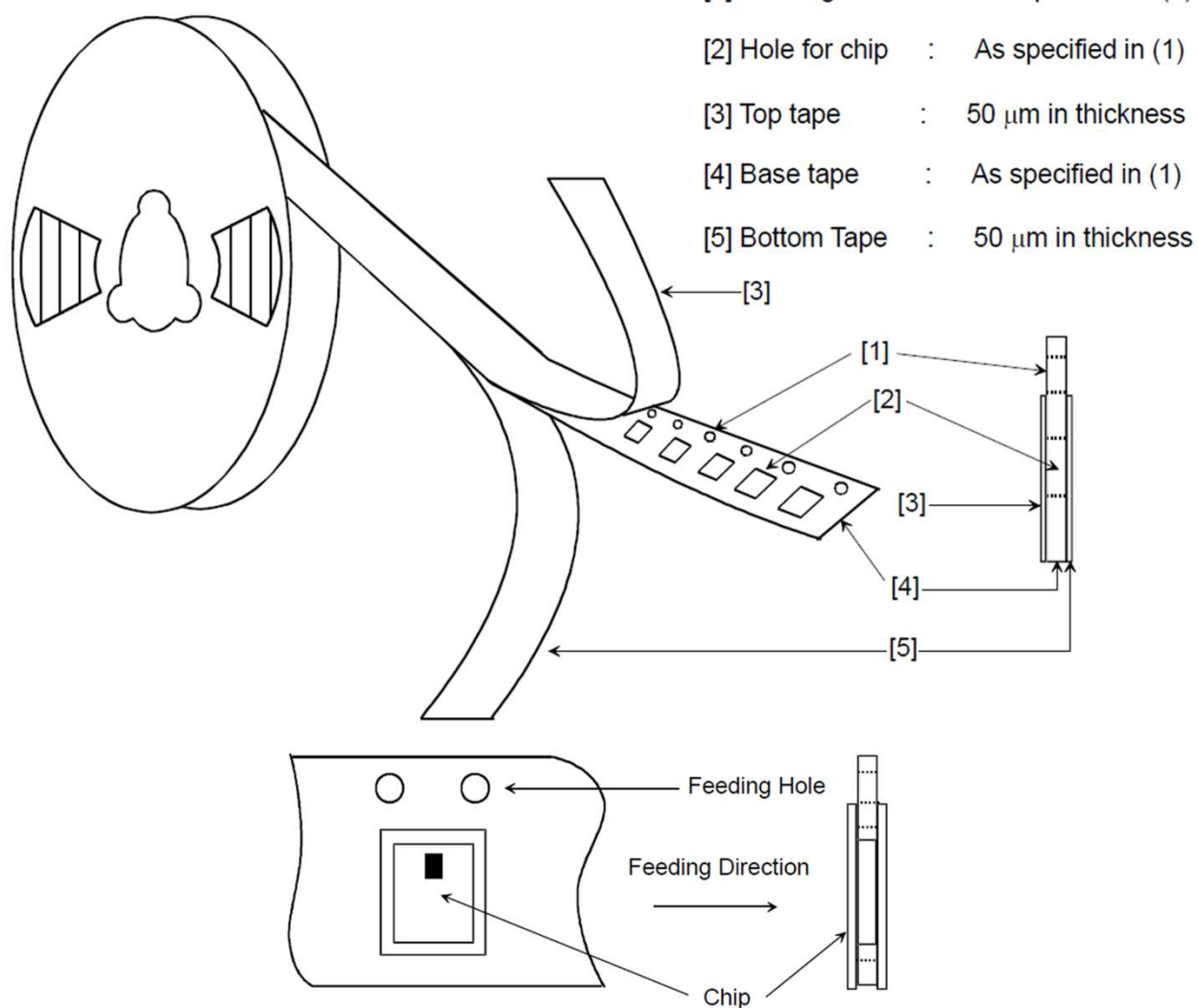
*2 Reference value



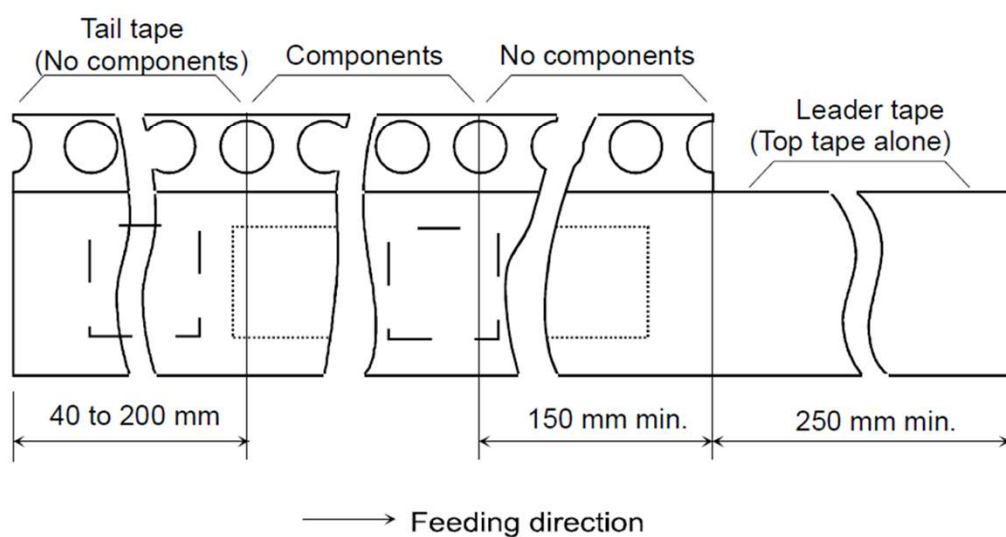
(2) Dimensions of Reel



(3) Taping Diagrams

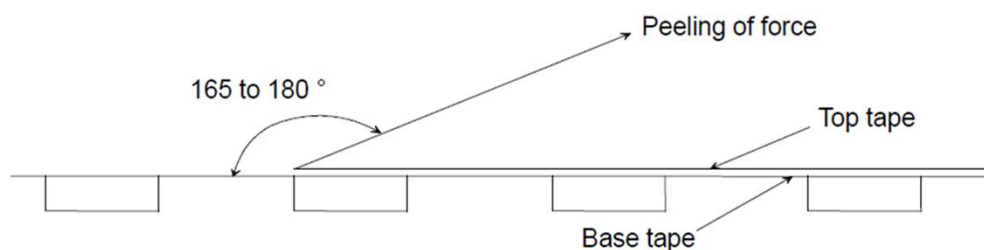


(4) Leader and Tail tape



- (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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