



No. CF453-STD

September 6, 2021

# Specification

Chip Filter

P/N: **LFB187G24CTPF453**



**Change History**

Revision No.	Date	Author	Comment
-	Sep.6. 2021	K.Nishino	Initial



## Filter

Part Number : **LFB187G24CTPF453**

### 1. Maximam Ratings

	Ratings	Conditions
Operating Temperature	-40 ~ +85 °C	
Power Capacity	0.5W	50Ω Load

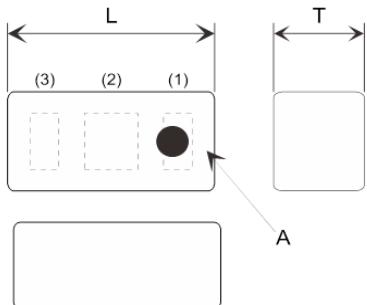
### 2. Electrical Characteristics ( at -40 ~ +85 °C)

Item	Frequency (MHz)	SPEC			Unit	
		Min.	Typ.(+25°C)	Max.		
Insertion Loss	at +25°C	6240.00 ~ 8250.00	-	0.65	0.95	dB
	at -40~+85°C	6240.00 ~ 8250.00	-	-	1.05	dB
	at +25°C	7750.00 ~ 8250.00	-	0.6	0.95	dB
	at -40~+85°C	7750.00 ~ 8250.00	-	-	1.05	dB
Ripple	6240.00 ~ 8250.00		0.19	0.7	dB	
	7750.00 ~ 8250.00		0.19	0.7	dB	
V.S.W.R. (@Input port) (@Output port)	6240.00 ~ 8250.00	-	1.13	1.78	-	
	6240.00 ~ 8250.00	-	1.13	1.78	-	
Attenuation (Absolute value)	700.00 ~ 2690.00	29.0	37	-	dB	
	3300.00 ~ 3800.00	29.0	37	-	dB	
	3800.00 ~ 4000.00	29.0	40	-	dB	
	4000.00 ~ 4200.00	34.0	45	-	dB	
	4400.00 ~ 5000.00	29.0	37	-	dB	
	12450.00 ~ 13500.00	20.0	31	-	dB	
	15500.00 ~ 16500.00	20.0	27	-	dB	

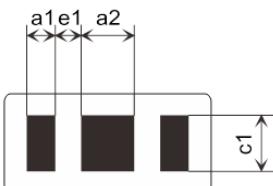


3. Construction, Dimensions & Marking

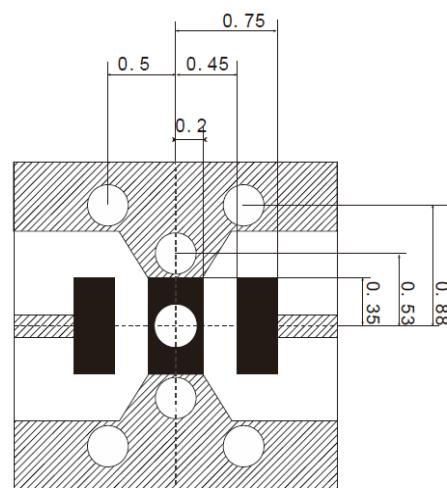
<Top View>



<Bottom View>



4. Land Pattern

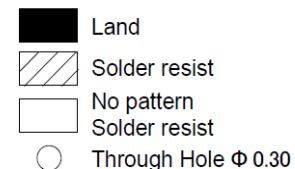


Mark	Meaning
A	Directional Input Mark

(in mm)

Mark	Dimension	Mark	Dimension
L	1.6 +/- 0.1	a2	0.40 +/- 0.10
W	0.8 +/- 0.1	c1	0.70 +/- 0.10
T	0.65 max.	e1	0.25 +/- 0.05
a1	0.30 +/- 0.10		

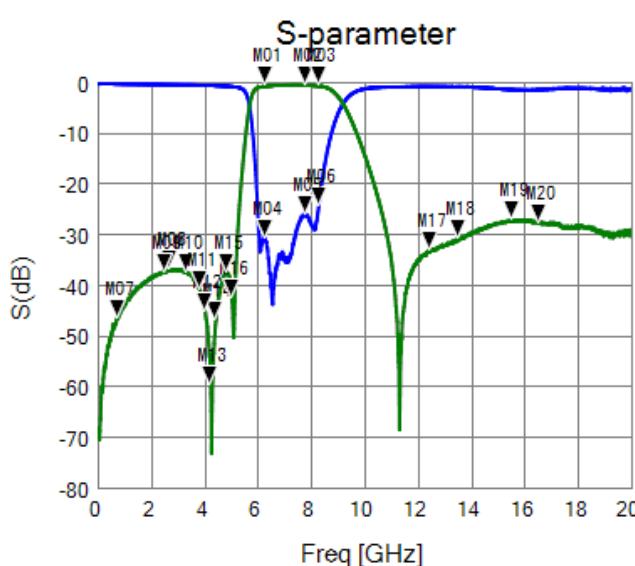
(in mm)



TERMINAL CONFIGURATION

Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	IN	(3)	OUT
(2)	GND	-	-

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

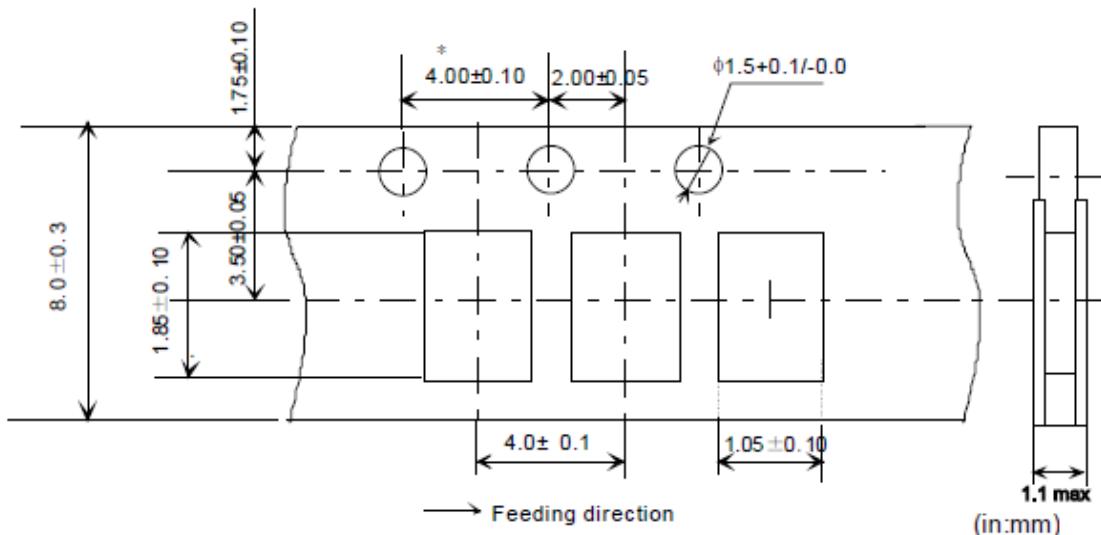


M01 : S(2,1) Freq 6.240G Hz S(dB) -0.647	M02 : S(2,1) Freq 7.750G Hz S(dB) -0.452	M03 : S(2,1) Freq 8.250G Hz S(dB) -0.595
M04 : S(1,1) Freq 6.240G Hz S(dB) -30.716	M05 : S(1,1) Freq 7.750G Hz S(dB) -26.036	M06 : S(1,1) Freq 8.250G Hz S(dB) -24.417
M07 : S(2,1) Freq 700M Hz S(dB) -46	M08 : S(2,1) Freq 2.690G Hz S(dB) -36.875	M09 : S(2,1) Freq 2.484G Hz S(dB) -37.417
M10 : S(2,1) Freq 3.300G Hz S(dB) -37.357	M11 : S(2,1) Freq 3.800G Hz S(dB) -40.902	M12 : S(2,1) Freq 4.000G Hz S(dB) -45.142
M13 : S(2,1) Freq 4.200G Hz S(dB) -59.671	M14 : S(2,1) Freq 4.400G Hz S(dB) -46.862	M15 : S(2,1) Freq 4.808G Hz S(dB) -37.404
M16 : S(2,1) Freq 5.000G Hz S(dB) -42.565	M17 : S(2,1) Freq 12.450G Hz S(dB) -33.115	M18 : S(2,1) Freq 13.500G Hz S(dB) -30.801
M19 : S(2,1) Freq 15.500G Hz S(dB) -27.146	M20 : S(2,1) Freq 16.500G Hz S(dB) -27.591	

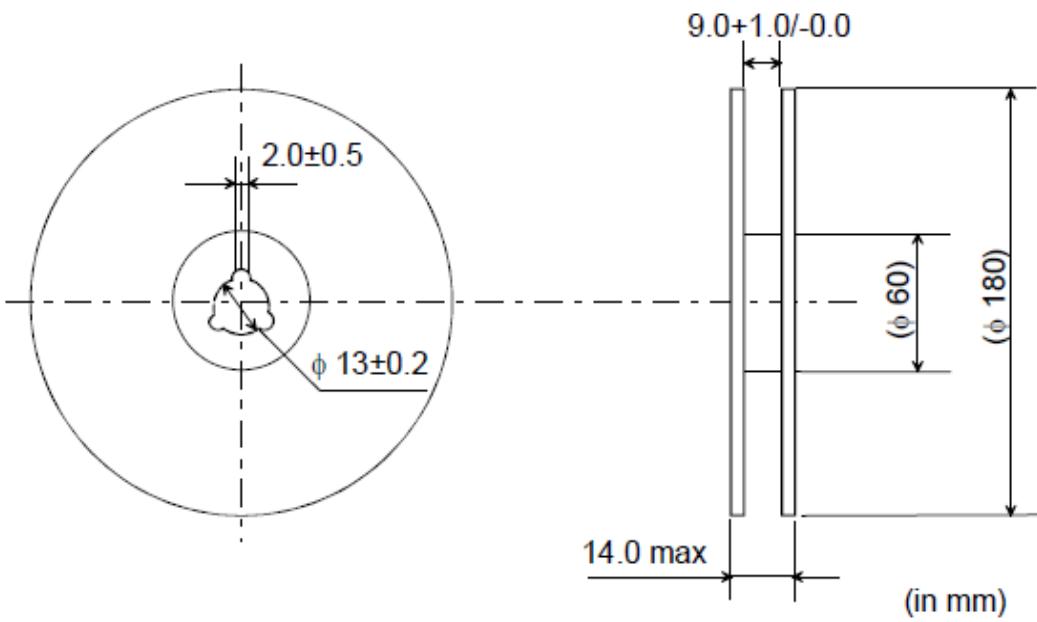


## 5.Tape and Reel Packing

(1) Dimensions of Tape (Paper tape)  
 \* Cumulative tolerance of max.  $\pm 0.3$  every 10 pitches.

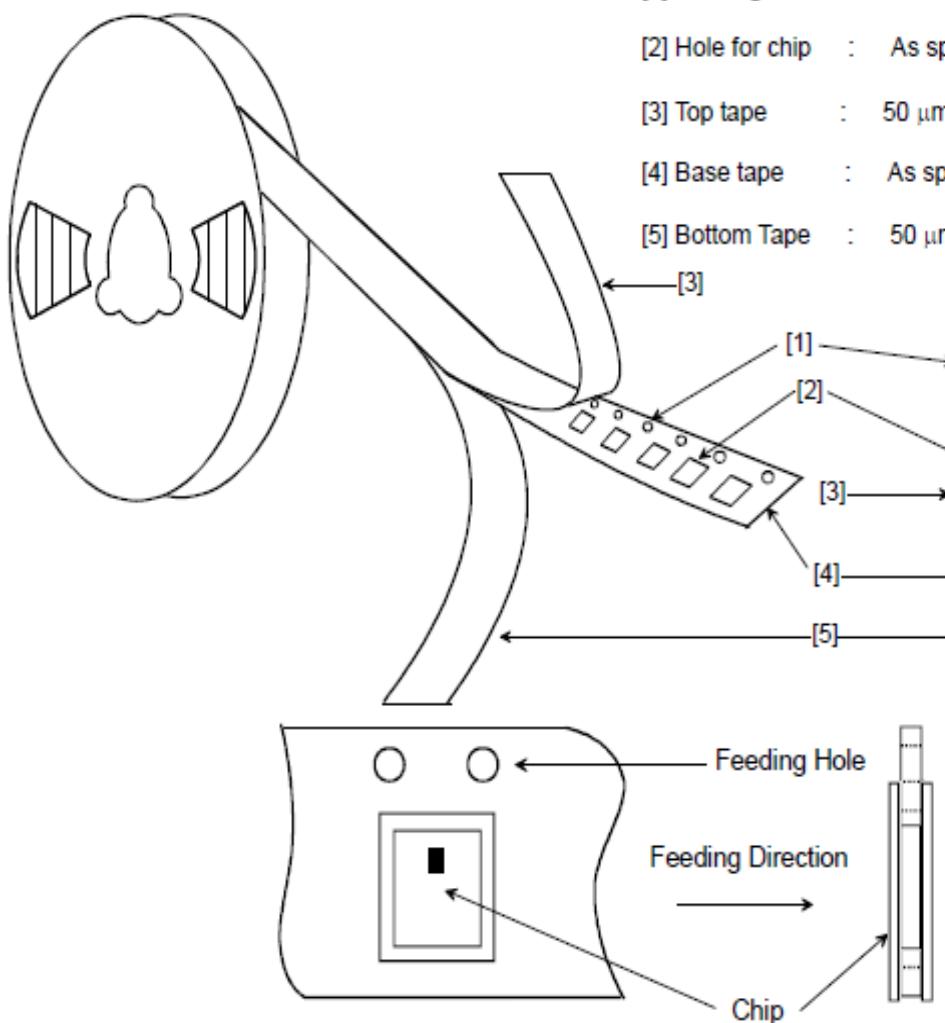


(2) Dimensions of Reel

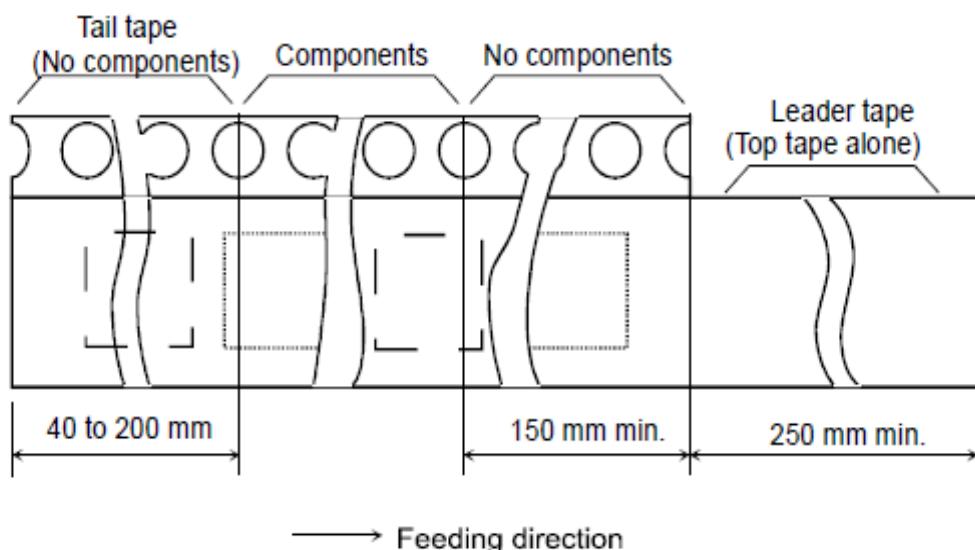




(3) Taping Diagrams



(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 base tape are not adhered at no components area for 250 mm min.

(7) Tear off strength against pulling of top tape : 5 N min.

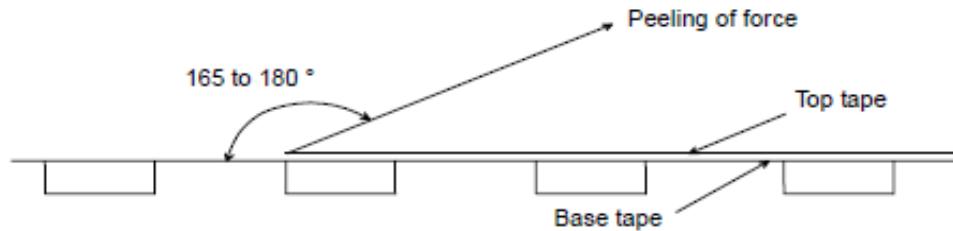
(8) Packaging unit : 4000 pcs. / reel

(9) Material : Base tape .....Plastic  
Reel .....Plastic

(10) Peeling of force : in the direction of peeling as shown below.

Peeling speed : 300mm/min ± 10mm/min

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



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