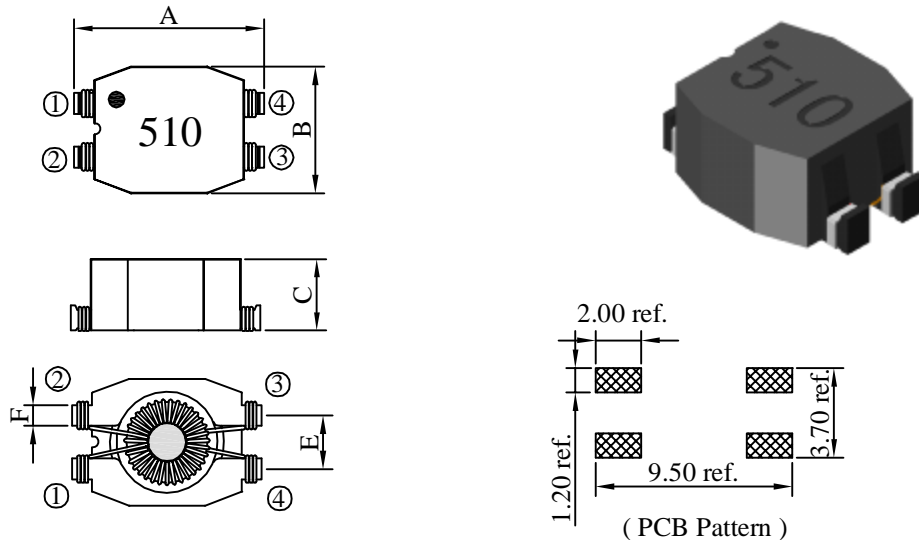


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Line Filter	ABC'S DWG NO.	CF0904□□□□L□-□□□		
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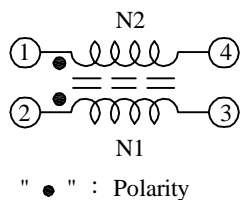
**I . Configuration and dimensions :**



Unit : m/m

A	B	C	E	F
9.00±0.3	6.00 max.	3.60±0.2	2.50 typ.	1.00 typ.

**II . Schematic diagram :**

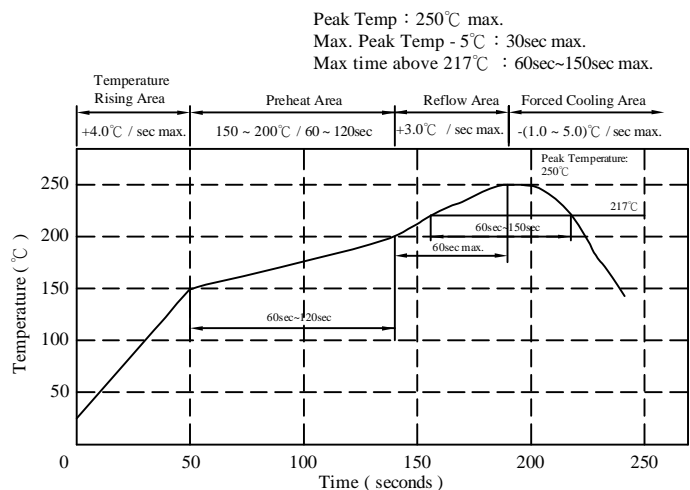


**III . Description :**

- a . Ferrite toroidal core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 0.38 g ( ref. )
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available

**IV . General specification :**

- a . Storage temp. : -40°C ---- +135°C
- b . Operating temp. : -40°C ---- +135°C  
(Temp. rise included)
- c . Resistance to solder heat : 250°C. 10 secs.



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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Line Filter	ABC'S DWG NO.	CF0904□□□□L□-□□□		
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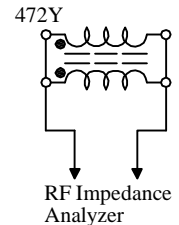
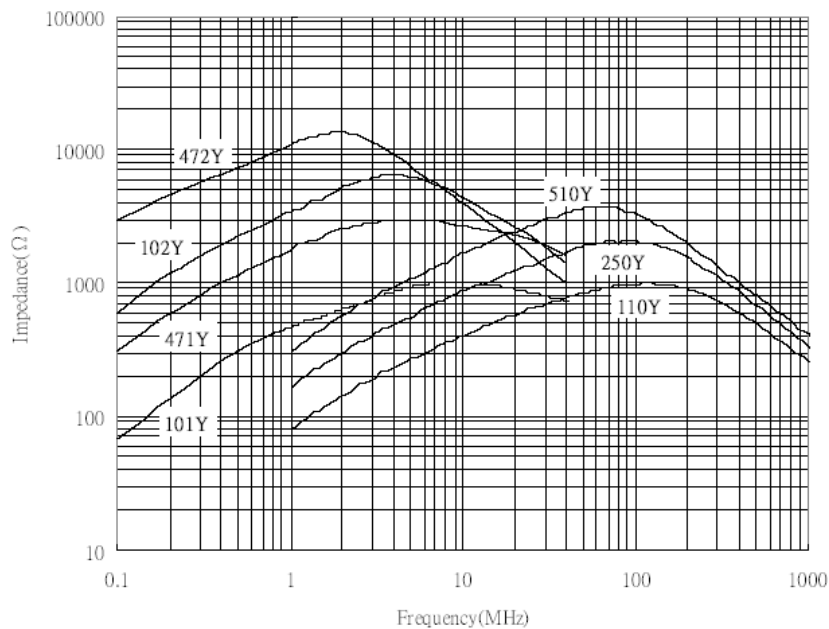
V . Electrical characteristics :

DWG No.	L (1-4) @ 100KHz,0.1 Vrms ( $\mu$ H)	LL (1-4) ( $\mu$ H) @ 100KHz,0.1 Vrms typ. ( 2-3 short)	RDC ( $\Omega$ ) max.	Rated Current max. (A)	Impedance ( $\Omega$ ) min.	Freq. Range ( MHz )	Winding
CF0904110YL□-□□□	11.0 $\pm$ 25%	0.05	0.12	0.5	300	20~300	Bifilar
CF0904250YL□-□□□	25.0 $\pm$ 25%	1.50	0.20	0.5	700	20~150	Sector
CF0904510YL□-□□□	51.0 $\pm$ 25%	2.00	0.30	0.5	1500	20~100	Sector
CF0904101YL□-□□□	100.0 $\pm$ 25%	0.85	0.10	0.5	700	3~20	Sector
CF0904471YL□-□□□	470.0 $\pm$ 25%	0.28	0.28	0.5	2000	2~15	Bifilar
CF0904102YL□-□□□	1000.0 $\pm$ 25%	0.29	0.40	0.5	2800	1~10	Bifilar
CF0904472YL□-□□□	4700.0 $\pm$ 25%	0.30	0.70	0.2	6000	0.5~3	Bifilar

- |                                       |   |
|---------------------------------------|---|
| 1). □: Packaging information : □ Code | 4). Rated voltage 80 Vdc / 42 Vac                   |
| 2). "- □□□" : Reference code          | 5). Hi-Pot ( N-N ) : 250 Vac / 60 Hz , 3 mA / 1sec. |
| 3). Electrical specifications at 25°C | 6). Temp. rise : 30°C max. at rated current         |

VI . Curve :

Impedance VS. Frequency



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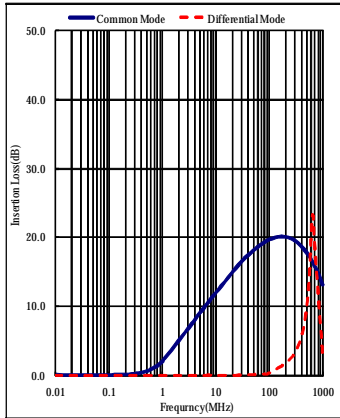
# SPECIFICATION FOR APPROVAL

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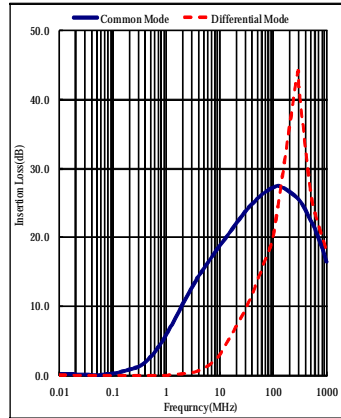
PROD. NAME	SMD Line Filter	ABC'S DWG NO.	CF0904□□□□L□-□□□		
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## Insertion loss VS. Frequency

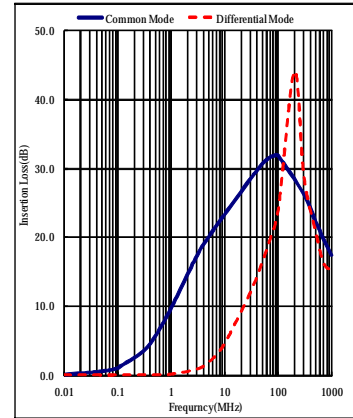
CF0904110YL□



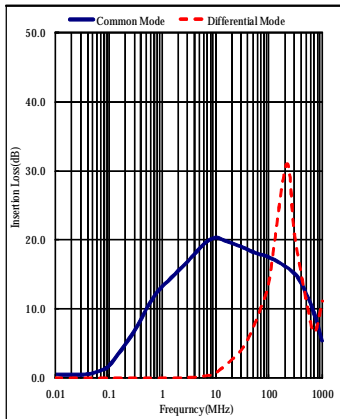
CF0904250YL□



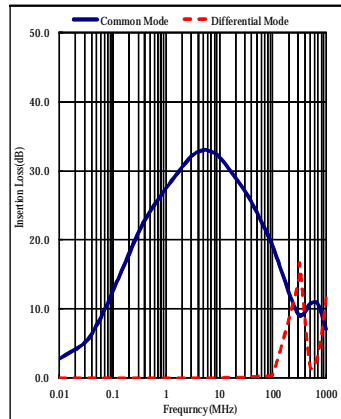
CF0904510YL□



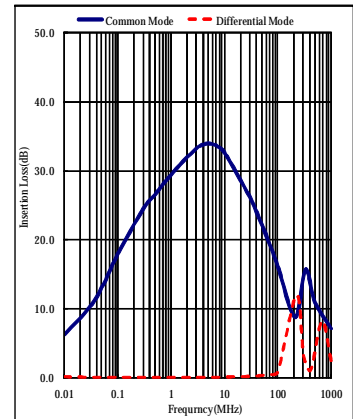
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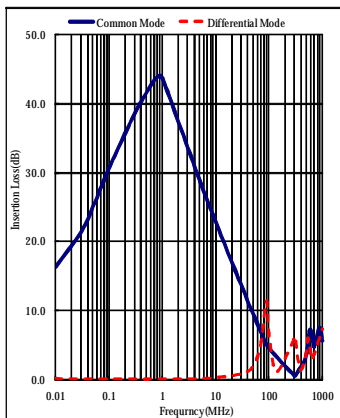
CF0904471YL□



CF0904102YL□



CF0904472YL□



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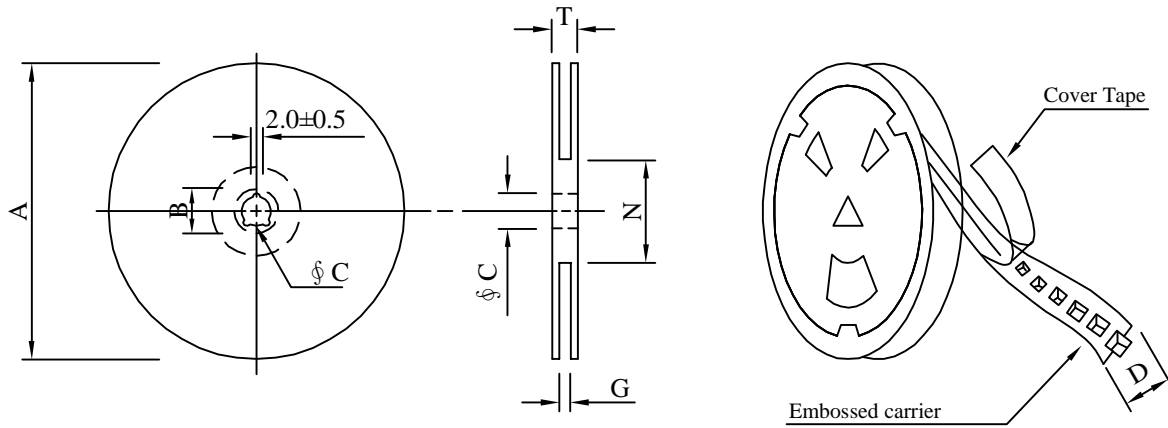
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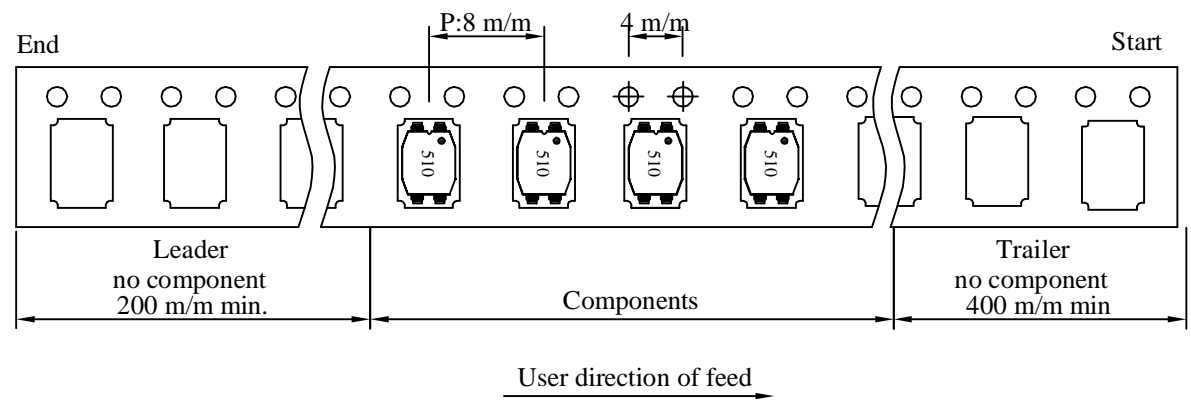
PROD. NAME	SMD Line Filter	ABC'S DWG NO.	CF0904□□□□L□-□□□		
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## VII . Packaging information :

### (1) Configuration



※Carrier tape width : D



### (2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	16	18 <sup>+0</sup>	50 <sup>-0</sup>	22.4

### (3) Q'TY & G.W. Per package

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	1,800	720	13 - 16	10,800	8.7	38 x 37 x 22

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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Line Filter	ABC'S DWG NO.	CF0904□□□□L□-□□□		
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### VIII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 135°C 2.Time:96 hours.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
2.Temperature Cycling	JESD22 Method JA-104	1.Temperature: -40°C ~ 135°C 2.Number of cycle:96 cycle 3.Dwell time:30 minutes	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature: 85±5 °C 2.Time:96 Hours 3.Humidity: 85±5% RH.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
4.Operational Life	MIL-PRF-27	1.Temperature: 135°C 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
5.External Visual	MIL-STD-883 Method 2009	Inspect product constructions, marking and workmanship.	1.No pollution on the surface of products. 2.Clear marking. 3.No crack.
6.Physical Dimensions	JESD22 Method JB-100	Verify physical dimensions to the applicable product detail specification.	Per product specification standard
7.Resistance to solvents	MIL-STD-202 Method 215	Immerse into solvent for 3±0.5 minutes & brush 10 times for their cycles.	1.No body change in appearance. 2.No marking blurred. 3.Inductance shall not change more than ±50%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Highest temperature : 250±5°C 2.Time ( temp. ≥ 217°C ) : 60~150 Second. 3.IR reflow times : 3 times.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
10.Rated current	MIL-STD-202 Method 330	Apply rated current for 5 second.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
11.Temperature rise	MIL-PRF-27	Apply rated current for 10 minutes.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
12.Over load	MIL-PRF-27	Apply twice as rated current for 5 minutes. (It's not application to some special design)	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
13.Solderability Test	J-STD-002	1.Baking in pre-testing : 155±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time ( temp. ≥ 217°C ) : 60~150 second. 4.IR reflow times : 1 times.	The terminal shall be at least 95% covered with fresh solder.
14.Electrical Characterization	User Spec.	1.Operating temperature : -40°C~135°C 2.Room temperature : 25°C.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±50%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DV:500V 2.Time:1minutes	1.During the test no breakdown. 2.The characteristic is normal after test.
16.Drop	JESD22-B111	Packaged & Drop down from 1m.In 1 angle 1ridges & 2 surfaces orientation.	1.No case deformation or change in appearance. 2.Inductance shall not change more than ±50%.
17.Terminal Strength Test	JIS-C-6429	1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.

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