

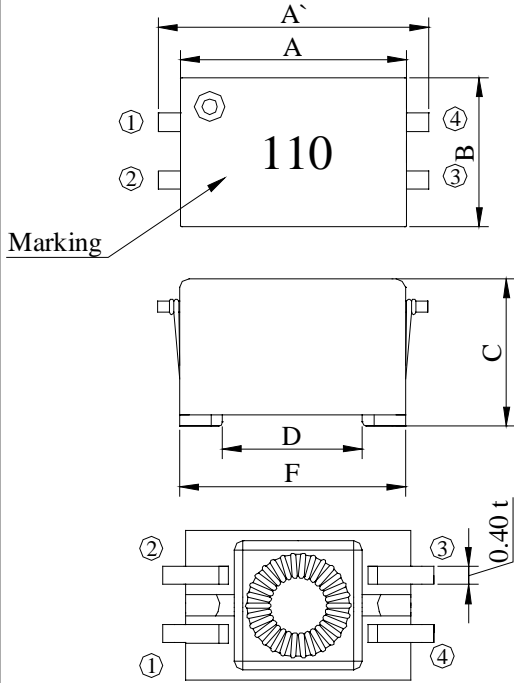
# SPECIFICATION FOR APPROVAL

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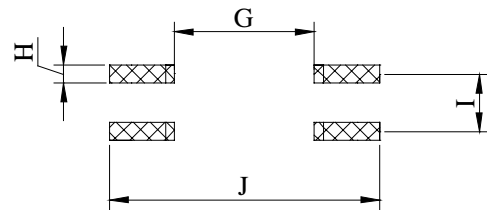
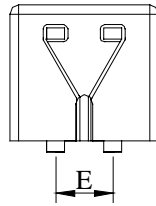
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PROD. NAME	SMD LINE FILTER	ABC'S DWG NO.	SF0503□□□□L□
		ABC'S ITEM NO.	

## I . CONFIGURATION & DIMENSIONS :

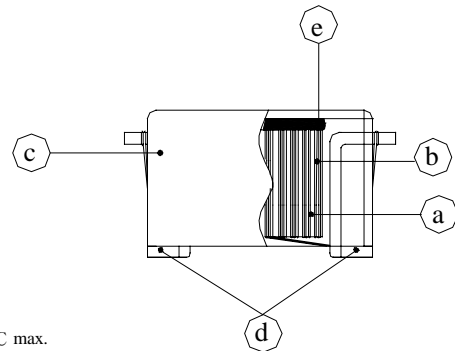
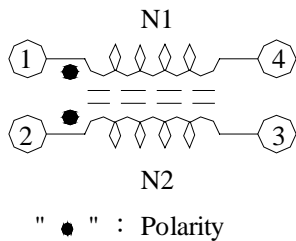


A`	: 6.00 ± 0.3	m/m
A	: 5.00 ± 0.3	m/m
B	: 3.30 ± 0.3	m/m
C	: 3.30 ± 0.2	m/m
D	: 3.10	typ. m/m
E	: 1.27	typ. m/m
F	: 5.00	typ. m/m
G	: 2.70	typ. m/m
H	: 0.60	ref. m/m
I	: 1.27	ref. m/m
J	: 6.40	ref. m/m



( PCB Pattern )

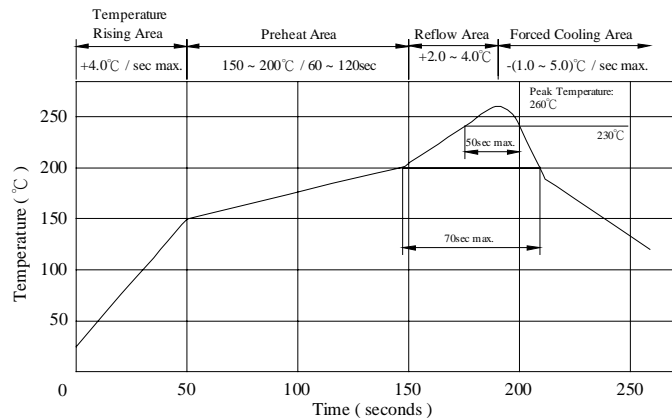
## II . SCHEMATIC DIAGRAM :



## III . MATERIAL DESCRIPTION :

- a . Core : Ferrite core
- b . Wire : Enamelled copper wire ( Class F )
- c . Base : LCP ( UL94V-0 )
- d . Terminal : Cu / Ni / Sn
- e . Adhesive : Epoxy resin

Peak Temp : 260°C max.  
 Max time above 230°C : 50sec max.  
 Max time above 200°C : 70sec max.



## IV . GENERAL SPECIFICATION :

- a . Temp. rise : 25°C max. at rated current
- b . Storage temp. : -40°C ---- +125°C
- c . Operating temp. : -40°C ---- +105°C
- d . Resistance to solder heat : 260°C. 10 secs.

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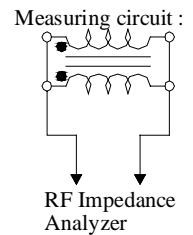
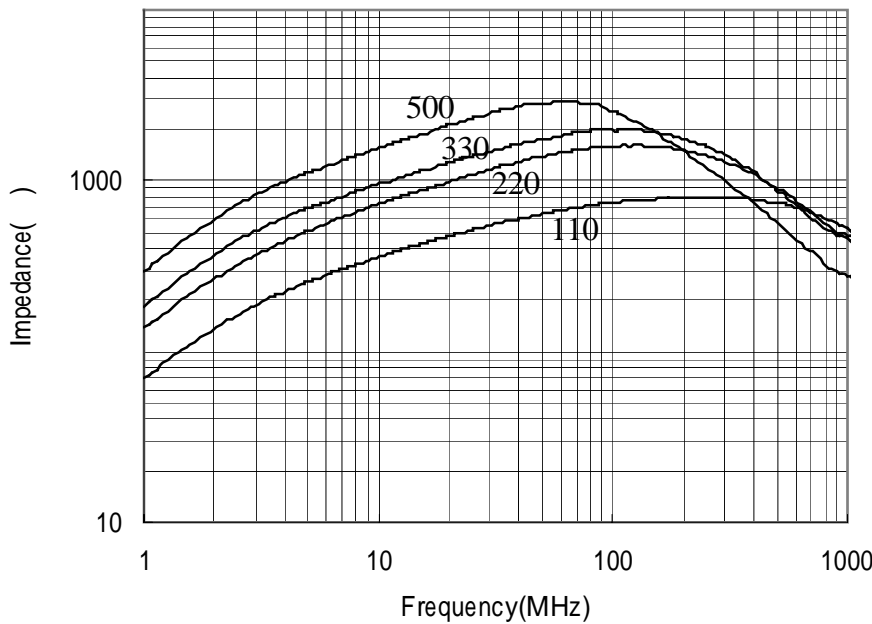
## V . ELECTRICAL CHARACTERISTICS :

DWG No.	L1 , L2 @ 10KHz , 0.1 Vrms ( μH )	FREQ. Range (MHz)	Impedance min. (Ω)	RDC(Ω) ( Each Winding )		Rated Current(mA) typ.
				max.	typ.	
SF0503110YL□	11.0 <sup>+50%</sup> <sub>-30%</sub>	100~400	450	0.18	0.13	100
SF0503220YL□	22.0 <sup>+50%</sup> <sub>-30%</sub>	40~250	900	0.23	0.17	100
SF0503330YL□	33.0 <sup>+50%</sup> <sub>-30%</sub>	30~180	1000	0.27	0.20	100
SF0503500YL□	50.0 <sup>+50%</sup> <sub>-30%</sub>	20~60	1200	0.32	0.24	100

- 1). □ : Packaging information ...  A Bulk  B Taping Reel
- 2). Rated voltage 50 Vdc / 100 Vdc(ref.)
- 3). Hi-Pot ( N-N ) : 500 Vac / 60 Hz , 3 mA / 1sec.

## VI . CHARACTERISTICS CURVE :

### IMPEDANCE VS. FREQUENCY



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# SPECIFICATION FOR APPROVAL

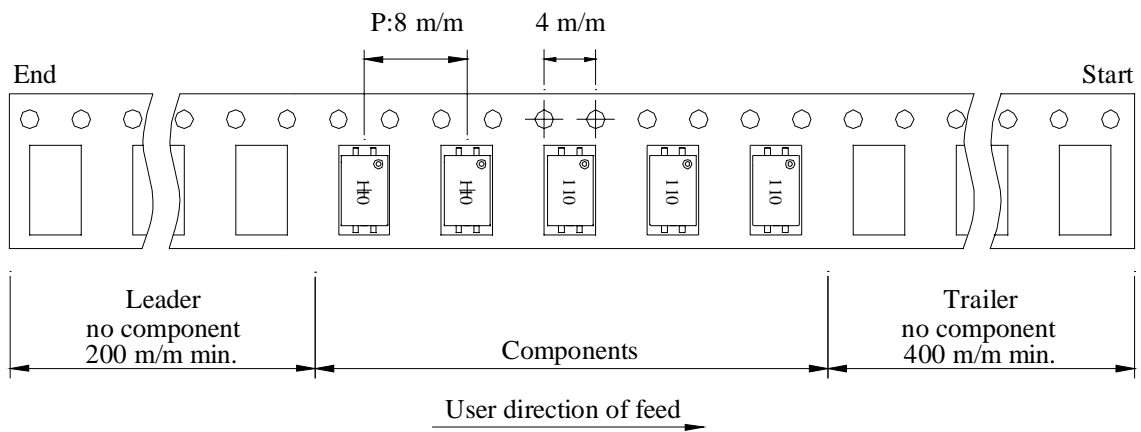
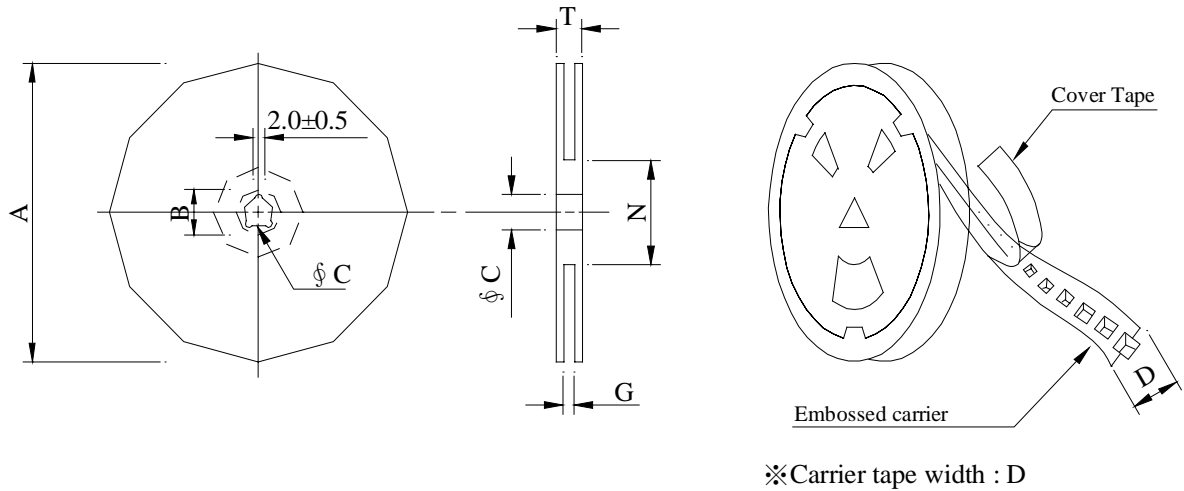
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PROD. NAME	SMD LINE FILTER	ABC'S DWG NO.	SF0503□□□□L□
		ABC'S ITEM NO.	

## VII . PACKAGING INFORMATION :

### ( 1 ) Configuration



### ( 2 ) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 16	178	21±0.8	13	16	18 <sup>+0</sup>	50 <sup>-0</sup>	20.5

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

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SF0503	500	50	07 - 16	15,000	2.5	42 x 41 x 24

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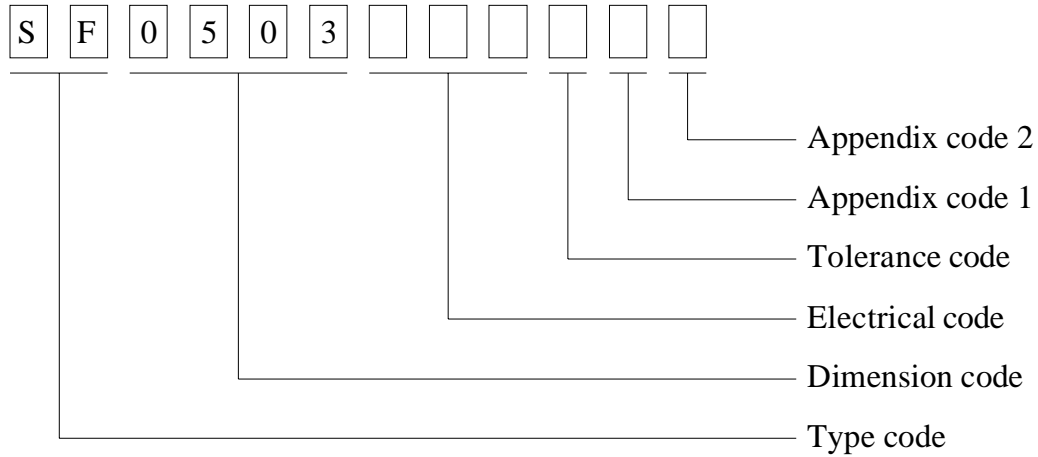
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VIII . DWG EXPRESSION :



- Appendix code 1 : S : Standard products  
 A~K , M~R , T~Z : Special products  
 L : Standard Lead Free products  
 1 ~ 9 : Special Lead Free products

Appendix code 2 :

Code	Inner Package	Inner Package Q'TY	Remark
A	Empty	Empty	
B	T / R ( Reel Package )	500    PCS	

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**IX . RELIABILITY TEST :**

Test item	Specification	Test condition												
Solderability	More than 90% of the terminal electrode shall be covered With fresh solder.	Preheat : 150±25°C for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5°C Flux : Rosin Dip time : 4±1 seconds												
Thermal shock test ( Temp. cycle )	Inductance shall not change more than ±35%	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp.</td> <td style="text-align: center;">—————&gt;</td> <td style="text-align: center;">-25±2 °C</td> </tr> <tr> <td style="text-align: center;">15 minutes</td> <td></td> <td style="text-align: center;">30 minutes</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp.</td> <td style="text-align: center;">—————&gt;</td> <td style="text-align: center;">85±2 °C</td> </tr> <tr> <td style="text-align: center;">15 minutes</td> <td></td> <td style="text-align: center;">30 minutes</td> </tr> </table> Total : 50 cycles	Room temp.	—————>	-25±2 °C	15 minutes		30 minutes	Room temp.	—————>	85±2 °C	15 minutes		30 minutes
Room temp.		—————>	-25±2 °C											
15 minutes			30 minutes											
Room temp.		—————>	85±2 °C											
15 minutes		30 minutes												
Humidity Resistance test	Temperature : 40±2°C Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours													
High temp. Resistance test	Temperature : 85±2°C Applied current : Per spec. Time : 500 hours													

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X . UL CARD :

OBMW2September 8, 2000

Magnet Wire-Component

JUNG SHING WIRE CO LTDE174837

231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN  
HSIEN TAIWAN

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
AIW	---	Polyamideimide		---	MW81-C	220
CFUEWB	---	Polyurethane		---	MW75C	130
EIAIW	---	Polyesterimide		Polyamideimide	MW35C	200
EILOCKY	---	Polyesterimide		Polyamide	---	180
EILOCKW	---	Polyesterimide		Modified Epoxy	---	200
EIW	---	Polyesterimide		---	---	220
EIW-2	---	Polyesterimide		---	MW74-C	200
FL.EILOCKY	---	Modified Polyester		Polyamide	---	155
LSFFW	---	Polyurethane		---	MW79-C	155
LSUEW	---	Polyurethane		---	---	130
PEW	---	Polyester		---	---	155
PEY	---	Polyester		Nylon	MW24-C	155
SF.FLW	---	Modified Polyester		---	MW26C	155
SF.EIW	---	Polyesterimide		---	MW77C	180
SF.BY@	---	Modified Polyester		Nylon	MW27-C	155
SF.FLY@	---	Modified Polyester		Nylon	MW27-C	155
SF.BLOCKBS	---	Modified Polyester		Modified Polyamide	---	155
SF.EILOCKY#	---	Polyesterimide		Polyamide	---	180
SF.EILOCKBS	---	Polyesterimide		Modified Polyamide	---	180
SF.BW@	---	Modified Polyester		---	MW26C	155
SFFW	---	Polyurethane		---	MW79	155

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dedicated to public safety and  
committed to quality service

Mtl Dsg	Mark Dsg	BC	Coat Typ	OC	ANSI Type	Temp Class
SFFY	---	Polyurethane		Polyamide	MW80C	155
UEW-1	---	Polyurethane		---	MW2-C	105
UEW-2	---	Polyurethane		---	---	130
UEW-4	---	Polyurethane		---	MW75C	130
UEY	---	Polyurethane		Nylon	MW28-C	130
UEY-2	---	Polyurethane		Polyamide	MW28-C	130

@ - May be suffixed by LZ; # - May be suffixed by LZ, EL or LZL.  
LZ - Signifies magened wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks **(JSW)** or 榮星電線, material designation or marked designation on packaed or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions  
For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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		SUMITOMO CHEMICAL CO LTD 5-33 KITAHAMA 4-CHOME CHUO-KO, OSAKA JAPAN						E54705 (M)			
Mtl Dsg	Col	Min Thk mm	UL94 Flame Class	Elec	RTI		H W I	H A I	H V T R	D 4 9 5	C T I
					with Imp	w/o Imp					
Liquid crystal polyester (LCP), designated "EKONOL" or "SUMIKASUPER", furnished in the form of pellets, (Contd)											
E4008 , E400X	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4008	NC , WT , BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E4010	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	220	180	220	3	4	—	—	—
		1.5	94V-0	220	200	240	2	4	—	—	—
		3.0	94V-0	220	200	240	1	4	0	5	4
E400(Y)L , E4008L	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	3	4	—	—	—
		1.5	94V-0	130	130	130	2	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4
E4810	NC , BK	0.30	94V-0	130	130	130	—	—	—	—	—
		0.75	94V-0	130	130	130	0	4	—	—	—
		1.5	94V-0	130	130	130	0	4	—	—	—
		3.0	94V-0	130	130	130	1	4	0	5	4

(X) Denotes any number 1 thru 9.  
(Y) Denotes any number 1 thru 7.

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