

# SPECIFICATION FOR APPROVAL

MESSRS : SUH KWANG

ITEM: LINE FILTER

LF - 303

DATE : 2007. 02. 05.



株式  
會社

## 光 星 電 子



### HEAD OFFICE

KWANG SUNG ELECTRONICS CO.,LTD.

108, 4 - KA, WONHYO - RO, YONGSAN - KU, SEOUL, KOREA

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### HONG KONG OFFICE

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### CHINA FACTORY

SHEN ZHEN KWANG SUNG ELECTRONICS CO.,LTD.

SHITOUSHAN INDUSTRIAL ZONE, ZHUAN CHANG

VILLAGE, SHIYAN TOWN BAOAN DISTRICT,

SHENZHEN GUANG DONG PROVINCE, CHINA

TEL : 86 - 755 - 2765 - 4650

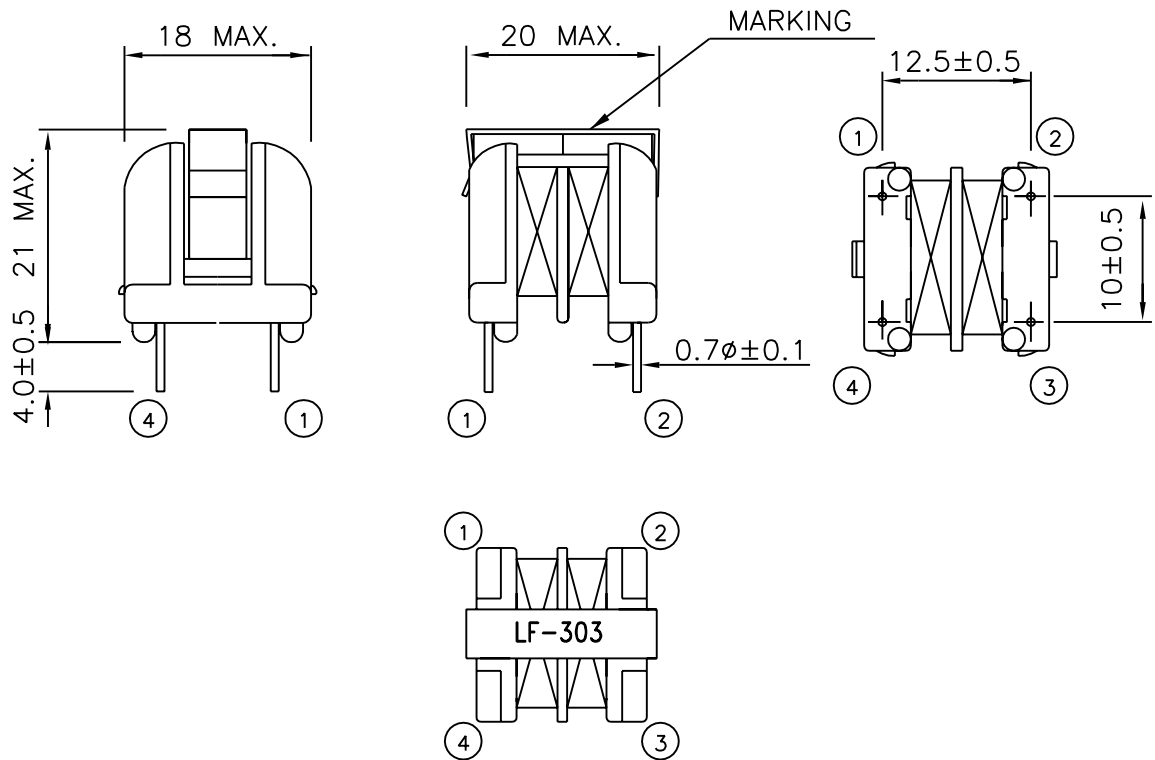
FAX : 86 - 755 - 2765 - 6007

: KS03QR0005 - A

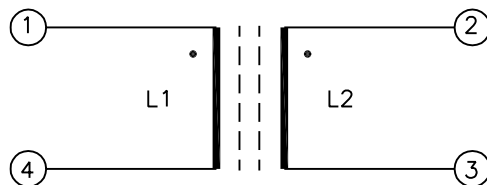
A4(297X210)mm

MESSRS : SUHKWANG	LINE FILTER <b>SPECIFICATION</b>	DATE : 2007. 02. 01.
KSE NAME : LF-303		PRODUCT CODE : 9F5

- ITEM : FILTER LINE (LF-303)
- APPEARANCE AND STRUCTURE



2-2. WINDING DIAGRAM (BOTTOM VIEW)



2-3. WINDING SPEC.

TERMINAL	WIRE	TURNS
1 - 4	2UEW 0.40φ	57Ts (Ref.)
2 - 3	2UEW 0.40φ	57Ts (Ref.)

DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED	APPROVED
		 技術 07.02.01 金賢渙	 技術 07.02.01 金會浣	 技術 07.02.01 金會浣	 技術 07.02.01 張東俊

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### 3. ELECTRICAL SPECIFICATION

3-1. INDUCTANCE L1 AND L2  
EACH 4.0mH MIN. at 1KHz, 1V, 25°C±5°C

3-2. INDUCTANCE(BALANCE) L1 AND L2  
|L1-L2|= 100uH MAX.

3-3. D.C RESISTANCE L1 AND L2  
EACH 0.25ohm ± 25%

3-4. WITHSTANDING VOLTAGE  
L1 COIL TO L2 COIL : AC1.5KV(rms) 1 MINUTE.  
ANY COIL TO CORE : AC1.0KV(rms) 1 MINUTE.

3-5. INSULATION RESISTANCE  
L1 COIL TO L2 COIL : 100Mohm MIN. APPLIED 500V

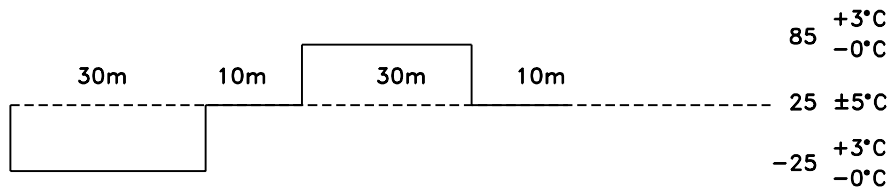
\* INSULATION DISTANCE

- BOBBIN THICKNESS : 0.4mm MIN.
- BASE BARRIER THICKNESS : 0.5mm MIN.

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#### 4. ENVIRONMENTAL CHARACTERISTICS

##### 4-1. TEMPERATURE CYCLING TEST



THE LINE FILTER SHALL BE CONDITIONED FOR 5 CYCLES OF ABOVE CYCLING CONDITION AND THAN REMOVED IN NORMAL ROOM AMBIENT 60 MINUTES AFTER THE PROCEDURE, IT SHALL SATISFY THE ELECTRICAL REQUIREMENTS SPECIFIED IN SECTION 3-6 AND, THERE SHALL NOT BE ANY ABNORMALITIES IN STRUCTURE.

##### 4-2. RESISTANCE SOLDERING HEAT

WHEN LEAD WIRE DIPPED TO  $3\pm 1\text{mm}$  FROM BOTTOM OF BOBBIN IN SOLDER OF  $250^{\circ}\text{C}\pm 10^{\circ}\text{C}$  AND KEPT  $5\pm 1$  SECOND.

THE LINE FILTER SHALL BE NO ABNORMALITY

##### 4-3. HUMIDITY RESISTANCE TEST

THE LINE FILTER SHALL BE CONDITIONED FOR 100 MINUTES AT 90 TO 95% RELATIVE HUMIDITY AND  $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ , THAN REMOVED IN NORMAL ROOM AMBIENT AT  $25^{\circ}\text{C}\pm 5^{\circ}\text{C}$ , 60 MINUTES AFTER THE ABOVE PROCEDURE, IT SHALL SATISFY THE ELECTRICAL REQUIREMENT SPECIFIED IN SECTION 3.

#### 5. PHYSICS

##### 5-1. VIBRATION TEST

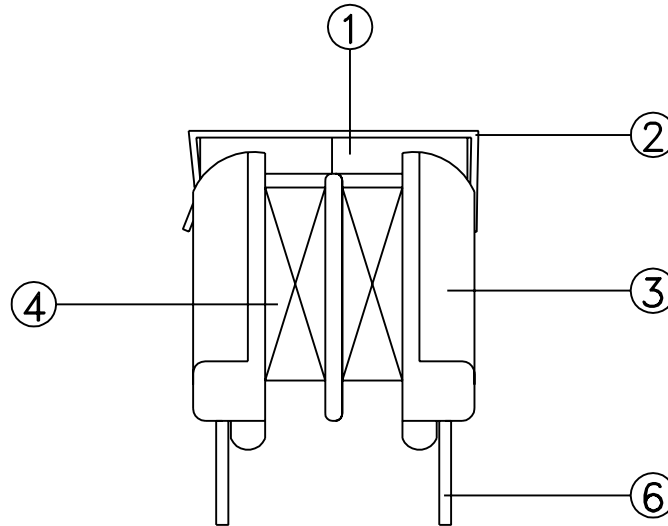
LINE FILTER SHALL BE SOLDERED WITH THE PRINTED BOARD OF 1.6mm THICKNESS AND THEN IT SHALL BE APPLIED WITH THE VIBRATION THAT THE AMPLITUDE IS 1.5mm AND THE FREQUENCY IS 10 TO 55Hz IN THE RIGHT-ANGLED 3 DIRECTIONS EACH FOR 2 HOURS. AFTER ABOVE PROCEDURE, THERE SHALL NOT BE ANY ABNORMALITIES IN ALL REQUIREMENTS.

##### 5-2. TENSILE STRENGTH OF LEAD WIRE

FOR 5 SECONDS APPLYING A LEAD OF 1.0 Kg IN AXIS DIRECTION OF EACH LEAD WIRE. THERE SHALL NOT BE ANY ABNORMALITY.

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### 6. METERIAL LIST



NO.	COMPONENT	NAME OF MATERIAL	MANUFACTURER OF COMPONENT	UL FILE NO
1	CORE	R7K TL7 SM-70S      UU1116 OR EQUIV.	DONG YANG MAGNETIC CO.,LTD. TIAN TONG ELECTRONIC CO.,LTD. SAM WHA ELECTRONIC CO.,LTD. OR EQUIV.	
2	CLAMP	UU1116	POONGSAN METAL CO., LTD.	
3	BOBBIN	PHENOL 94V-0, PF2736 V-0, PM8375 94V-0, T-355J	HEXION SPECIALTY CHEMICALS GMBH SUMITOMO BAKELITE CO.,LTD. CHANG CHUN PLASTICS CO.,LTD.	E61040(M) E41429(M) E 59481(S)
4	WIRE	0.40 $\phi$ (2UEW)	DONG YANG ELECTRONICS IND CO.,LTD. HOILUEN ELECTRICAL CO.,LTD.	E102761(N) E164409(S)
5	VARNISH	RF-1006 OR EQUIV.	LOLIDA CO., LTD. OR EQUIV.	
6	TERMINAL	SDCP (SOLDER DIPPED COPPER COVER STEEL WIRE) 0.7 $\phi$	SAMATRON CO.,LTD.	

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## \* BOBBIN

HEXION SPECIALTY CHEMICALS GMBH  
POSTFACH 7154  
58609 ISERLOHN-LETMATHE, GERMANY

E61040

Material Dsg	Color	Min. Thk mm	UL94 Flame Class	Elec	RTI		H W I	H A I	H V R	D 4 5	C T I
					With Imp	Mech W/o str					
PF 2736(a)(b)	BK	0.46	V-0	-	-	150	150	150	0	5	3
	ALL	0.81	V-1	0	2	150	150	150			
	NC,GN,BK	0.81	V-0	0	2	150	150	150			
	ALL	1.5	V-0	0	2	150	150	150			
		3.0	V-0	0	2	150	150	150			

- (a) - Optional Suffix "H".
- (b) - Grade designation may be followed by a four digit number representing color, P or S indicating type of molding, a single digit representing slight color variation.

Marking: Company name or tradename "BAKELITE", "RUTAFORM" and material designation on container, wrapper or finished part.

QMF22  
Plastics - Component  
SUMITOMO BAKELITE CO LTD

E41429

Material Dsg	color	MIN Thk mm	Flame Class	H W I	H A I	Elec	RTI		H W I	H A I	H V R	D 4 5	C T I
							Imp	Mech str					
PM-8010	BK	0.75	V.O	-	-	-	-	-	-	-	-	-	-
Phenolic-GF, designated "SUMIKON" furnished as pellets or granular													
PM-2007	BK	0.40	V.O	-	-	150	150	150	-	-	-	-	-
PM-8075	BK	0.40	V.O	-	-	150	150	150	-	-	-	-	-
Phenolic(PF)designated "Sumikon" furnished as pellets, granular													
PM-0001	BK	0.71	HBB	-	-	150	150	150	-	-	-	-	-
PM-1200	BK	0.71	HBB	-	-	150	150	150	-	-	-	-	-
PM-1500	BK	0.61	HBB	-	-	150	150	150	-	-	-	-	-
PM-200	BK	0.75	HBB	-	-	150	150	150	-	-	-	-	-
PM-200L	BK	0.75	HBB	-	-	150	150	150	-	-	-	-	-
		2.6	V.O	-	-	150	150	150	-	-	-	-	-
PM-3000	BK	0.50	V.O	-	-	150	150	150	-	-	-	-	-
PM-300	RD	1.5	HBB	-	-	150	150	150	-	-	-	-	-
PM-300	BN,BK	0.47	V.O	-	-	150	150	150	-	-	-	-	-

QMF22 March 4, 1994  
Component-Plastics

CHANG CHUN PLASTICS CO LTD

E59481 (S)

Material Dsg	Color	Min. Thk mm	UL94 Flame Class	Elec	RTI With Imp	RTI Mech str	(C-cont. from B card)		
							1	2	3
T-355J	BK	0.62	94V-0	150	150	150	1	0	2
		1.00	94V-0	150	150	150	1	0	2
T359J	BK,BN	0.79	94HB	150	150	150	1	0	4
		1.57	94HB	150	150	150	1	0	4
		3.17	94HB	150	150	150	0	0	4
T373J	BK,BN	1.00	94V-1	150	150	150	2	0	3
		1.00	94V-0	150	150	150	2	0	3
T375J	BK,BN	2.00	94V-0	150	150	150	1	0	3
		0.79	94V-0	150	150	150	1	0	4
T377J	BK	1.58	94V-0	150	150	150	0	0	4
		3.17	94V-0	150	150	150	0	0	4
		0.79	94HB	150	150	150	2	0	4
		1.58	94HB	150	150	150	1	0	4
		3.17	94HB	150	150	150	0	0	4

Report: January 6, 1976.

Replaces E59481C dated February 7, 1989.  
262854001 N7047 Underwriters Laboratories Inc.®

(Cont. on C1 card)  
D11/0018965

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## \* WIRE

**DONG YANG ELECTRONICS IND CO LTD** **E102761 (N)**  
**660-1 BANWOL-RI TAIAN-EUB Hwasung-Gun,**  
**KYONGGI-DO 445-970 KOREA**

Mtl Dsg	BC	Coat Typ	OC	ANSI Type	Tl
AI-EIW	Polyester-imide		Polyamide-imide	MW35	200
EIW	Polyester-imide			MW30	180
NY-EIW	Polyester-amide-imide		Polyamide	MW76	180
NY-PEW	Polyester		Polyamide	MW24	155
NY-PEW(F)	Polyester		Polyamide	MW24	155
NY-U EW	Polyurethane		Polyamide	MW28	130
U EW	Polyurethane		—	MW75	130

Marking: Company name or "E102761" and material designation or marked designation on package or reel and Recognized Component Mark.

OBMWZ January 29, 1999  
 Component - Magnet Wire

**HOI LUEN ELECTRICAL MFR CO LTD** **E164409**  
**8TH FL, UNIT 1 HOI LUEN IND CENTRE 55 HOI YUEN RD, BLK** **(A card)**  
**B, KWUN TONG KOWLOON HONG KONG**

Mtl Dsg	BC	Coating Type	TC	ANSI Type	Tl
U EW	Polyurethane		—	MW75-C	130
PEW	Polyester		—	MW-3C	155
U EW	Polyurethane		—	MW28-C	130
EIW	Polyester-imide		—	MW30-C	180

Reports: August 8, 1995; February 2, 1998; August 8, 1995; January 22, 1999.

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