

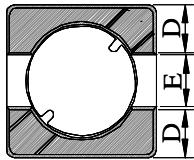
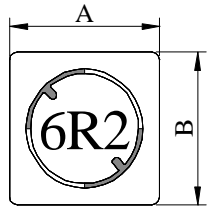
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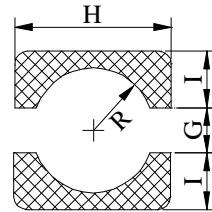
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SH6022□□□□L□-□□
		ABC'S ITEM NO.	

## I . CONFIGURATION & DIMENSIONS :

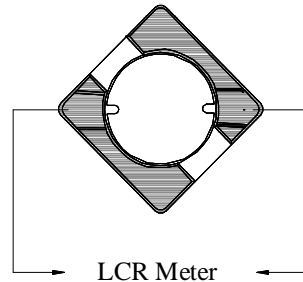
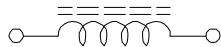


A	: 6.80±0.2	m/m
B	: 6.80±0.2	m/m
C	: 2.30±0.2	m/m
D	: 2.30 typ.	m/m
E	: 2.20 typ.	m/m
G	: 2.10 ref.	m/m
H	: 7.30 ref.	m/m
I	: 2.60 ref.	m/m
R	: 2.70 ref.	m/m



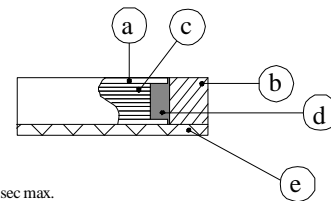
( PCB Pattern suggestion )

## II . SCHEMATIC DIAGRAM :



## III . MATERIALS :

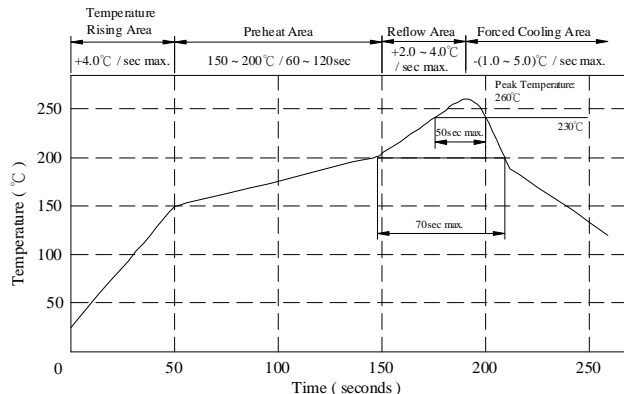
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire ( Class F & H )
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Products comply with RoHS' requirements



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 : 30°C max.
- 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.	Inductance ( $\mu$ H)	SRF (MHz) typ.	RDC (m $\Omega$ )		Irms (mA) max.	Isat (mA) typ.
			typ.	max.		
SH6022R90YL□-□□□	0.9 $\pm$ 30%	108.0	10.0	14.0	4800	4400
SH60221R5YL□-□□□	1.5 $\pm$ 30%	79.0	13.0	18.0	4300	3500
SH60222R2YL□-□□□	2.2 $\pm$ 30%	68.0	16.0	24.0	3400	2600
SH60223R3YL□-□□□	3.3 $\pm$ 30%	52.0	19.0	32.0	2800	2200
SH60225R0YL□-□□□	5.0 $\pm$ 30%	48.0	36.0	46.0	2150	2000
SH60226R2YL□-□□□	6.2 $\pm$ 30%	45.0	41.0	54.0	1900	1700
SH60227R5YL□-□□□	7.5 $\pm$ 30%	38.0	46.0	60.0	1700	1500
SH6022100YL□-□□□	10.0 $\pm$ 30%	30.0	52.0	70.0	1600	1300
SH6022120YL□-□□□	12.0 $\pm$ 30%	32.0	62.0	80.0	1430	1150
SH6022150YL□-□□□	15.0 $\pm$ 30%	30.0	73.0	95.0	1310	1050
SH6022180YL□-□□□	18.0 $\pm$ 30%	29.0	78.0	100.0	1280	1000
SH6022220YL□-□□□	22.0 $\pm$ 30%	23.0	85.0	120.0	1220	950
SH6022270YL□-□□□	27.0 $\pm$ 30%	19.0	118.0	150.0	1040	850
SH6022330YL□-□□□	33.0 $\pm$ 30%	19.0	137.0	200.0	930	780
SH6022390YL□-□□□	39.0 $\pm$ 30%	20.0	202.0	250.0	760	700
SH6022470YL□-□□□	47.0 $\pm$ 30%	18.0	223.0	280.0	730	620
SH6022560YL□-□□□	56.0 $\pm$ 30%	15.0	257.0	320.0	680	560
SH6022680YL□-□□□	68.0 $\pm$ 30%	14.0	292.0	360.0	640	500
SH6022820YL□-□□□	82.0 $\pm$ 30%	11.0	328.0	420.0	600	450
SH6022101YL□-□□□	100.0 $\pm$ 30%	9.8	358.0	480.0	550	400
SH6022121YL□-□□□	120.0 $\pm$ 30%	9.8	455.0	600.0	480	360
SH6022151YL□-□□□	150.0 $\pm$ 30%	9.3	583.0	720.0	430	320
SH6022181YL□-□□□	180.0 $\pm$ 30%	8.6	664.0	860.0	400	280
SH6022221YL□-□□□	220.0 $\pm$ 30%	6.9	820.0	1100.0	360	250
SH6022271YL□-□□□	270.0 $\pm$ 30%	6.4	948.0	1300.0	340	220
SH6022331YL□-□□□	330.0 $\pm$ 30%	6.0	1192.0	1500.0	290	200
SH6022391YL□-□□□	390.0 $\pm$ 30%	5.5	1311.0	1800.0	275	180
SH6022471YL□-□□□	470.0 $\pm$ 30%	5.0	1713.0	2200.0	240	170
SH6022561YL□-□□□	560.0 $\pm$ 30%	4.9	1909.0	2700.0	225	160
SH6022681YL□-□□□	680.0 $\pm$ 30%	4.0	2497.0	3500.0	190	150
SH6022821YL□-□□□	820.0 $\pm$ 30%	3.4	3315.0	4000.0	172	140
SH6022102YL□-□□□	1000.0 $\pm$ 30%	3.3	3827.0	5000.0	160	130

- 1). □ : Packaging Information... □A : Bulk □B : Taping Reel
- 2). "-□□□" : Reference code
- 3). Inductance Test Freq. : 100KHz /0.1V
- 4). Irms base on Temp. rise 30°C max.
- 5). Isat base on  $\Delta$ L/L0A=35% typ.

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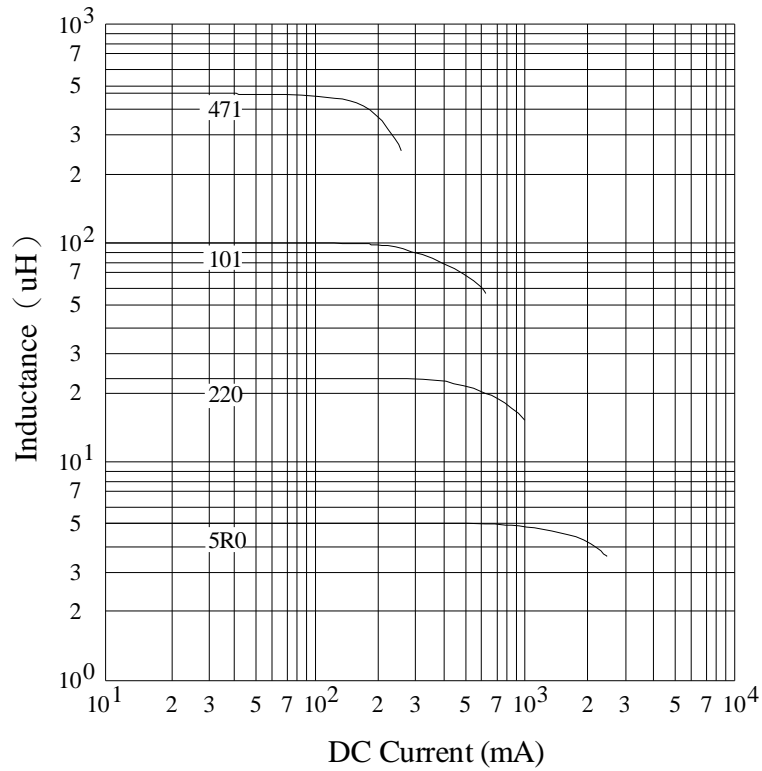
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VI . INDUCTANCE VS. DC CURRENT CURVE :



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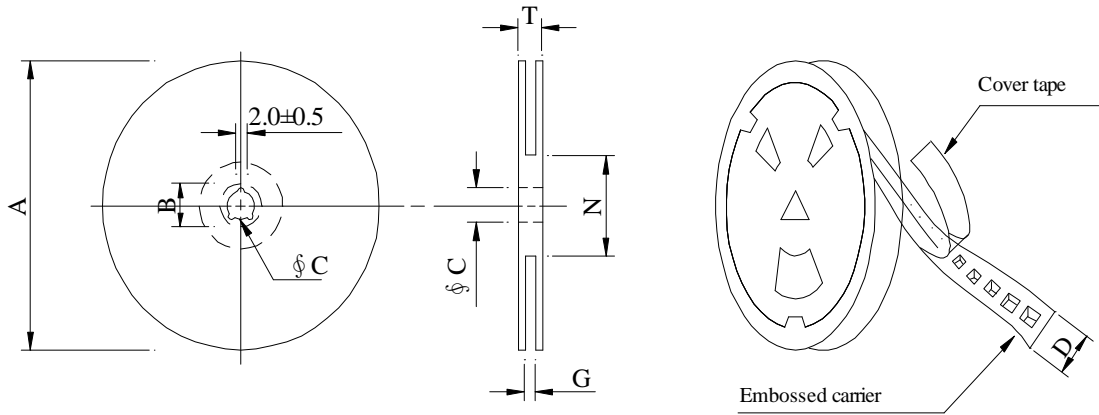
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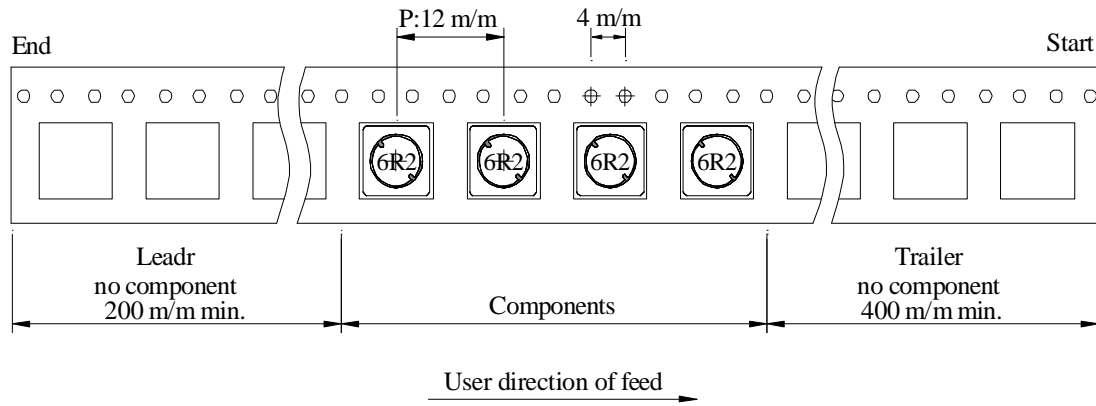
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## VII . PACKAGING INFORMATION :

### ( 1 ) Configuration



※Carrier tape width : D



### ( 2 ) Dimensions

Unit:m/m

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

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SH6022	500	230	07 - 16	15,000	8.20	42 x 41 x 24
SH6022	1,500	950	13 - 16	9,000	12.00	40 x 40 x 24

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**IX . RELIABILITY TEST :**

Test item	Specification	Test condition						
Solderability	More than 95% of the terminal electrode shall be covered With fresh solder.	Preheat : 155°C / 4 hours. Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5°C Flux : Rosin Dip time : 5±0.5 seconds						
Thermal shock test ( Temp. cycle )	Electrical oharacteristics shall not change more than ±20%	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">-40 °C 30 minutes</td> </tr> <tr> <td style="text-align: center;">Room temp. 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;">+105 °C 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. 15 minutes	→	-40 °C 30 minutes	Room temp. 15 minutes	→	+105 °C 30 minutes
Room temp. 15 minutes		→	-40 °C 30 minutes					
Room temp. 15 minutes		→	+105 °C 30 minutes					
Humidity test		Temperature : 40±2°C Humidity : 90±5% Time : 1000 hours						
High temp. Resistance test	Temperature : 105±5°C Applied current : Per spec. Time : 96 hours							

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X . UL CARD :

OBMW2 September 8, 2000

Magnet Wire-Component

JUNG SHING WIRE CO LTD E174837

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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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 magnet 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 or 榮星電線, material designation or marked designation on packed 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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OBMW2/E174837  
September 8, 2000

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