

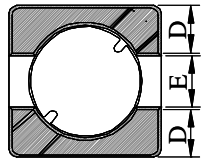
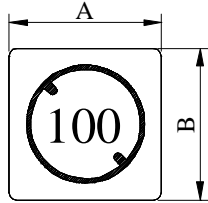
SPECIFICATION FOR APPROVAL

REF : 20080801-A

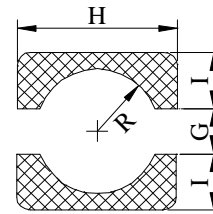
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO. ABC'S ITEM NO.	SH4022□□□□L□-□□□
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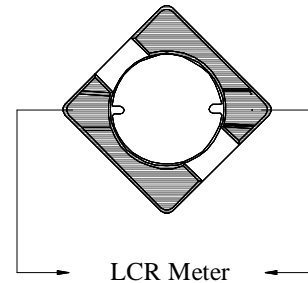
I . CONFIGURATION & DIMENSIONS :



- A : 4.80±0.3 m/m
- B : 4.80±0.3 m/m
- C : 2.20±0.2 m/m
- D : 1.60 typ. m/m
- E : 1.60 typ. m/m
- G : 1.50 ref. m/m
- H : 5.30 ref. m/m
- I : 2.00 ref. m/m
- R : 1.80 ref. m/m



(PCB Pattern suggestion)

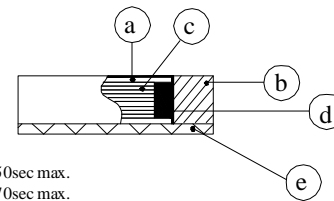


II . SCHEMATIC DIAGRAM :



III . MATERIALS :

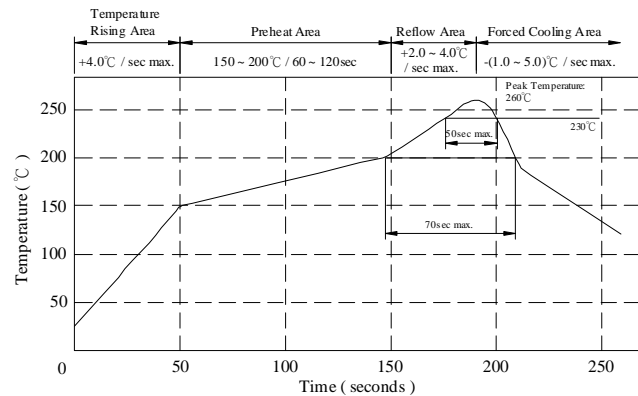
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire (Class F & H)
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Products comply with RoHS' requirements



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 : 20°C typ.
- 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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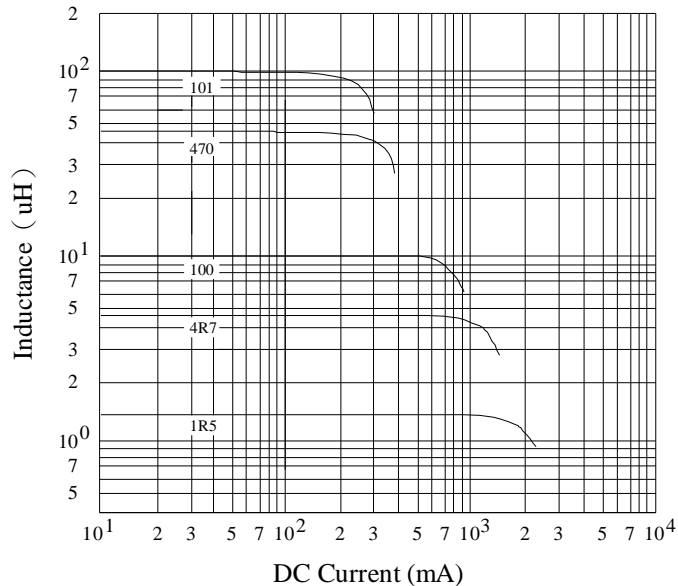
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		ABC'S ITEM NO.	

V . ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance (μ H)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (m Ω)		I _{rms} (mA) typ.	I _{sat} (mA) typ.
					typ.	max.		
SH40221R5YL□-□□□	1.5 \pm 30%	8.0	7.960	100.0	13.5	20.0	3500	1800
SH40222R2YL□-□□□	2.2 \pm 30%	8.0	7.960	70.0	16.5	25.0	3300	1600
SH40223R3YL□-□□□	3.3 \pm 30%	8.0	7.960	60.0	24.0	36.0	3000	1400
SH40224R7YL□-□□□	4.7 \pm 30%	8.0	7.960	50.0	37.0	55.0	2200	1100
SH40226R8YL□-□□□	6.8 \pm 30%	9.0	7.960	35.0	50.0	70.0	2000	950
SH4022100YL□-□□□	10.0 \pm 30%	9.0	2.520	30.0	65.0	85.0	1700	800
SH4022150YL□-□□□	15.0 \pm 30%	22.0	2.520	20.0	98.0	130.0	1300	680
SH4022220YL□-□□□	22.0 \pm 30%	15.0	2.520	18.0	138.0	180.0	1100	530
SH4022330YL□-□□□	33.0 \pm 30%	15.0	2.520	15.0	217.0	280.0	800	420
SH4022470YL□-□□□	47.0 \pm 30%	13.0	2.520	12.0	269.0	350.0	700	350
SH4022680YL□-□□□	68.0 \pm 30%	13.0	2.520	11.0	409.0	520.0	600	300
SH4022101YL□-□□□	100.0 \pm 30%	20.0	0.796	9.0	513.0	650.0	550	240
SH4022121YL□-□□□	120.0 \pm 30%	30.0	0.796	9.0	585.0	730.0	520	210
SH4022151YL□-□□□	150.0 \pm 30%	40.0	0.796	8.0	738.0	930.0	450	180

- 1). □ : Packaging Information... [A] : Bulk [B]: Taping Reel
- 2). "- □□□ " : Reference code
- 3). Inductance Test Freq. : 100KHz / 0.1V
- 4). I_{rms} base on Temp. rise 20°C typ.
- 5). I_{sat} base on $\Delta L/L_0A = 35\%$ typ.

@ Inductance VS. DC Current Curve



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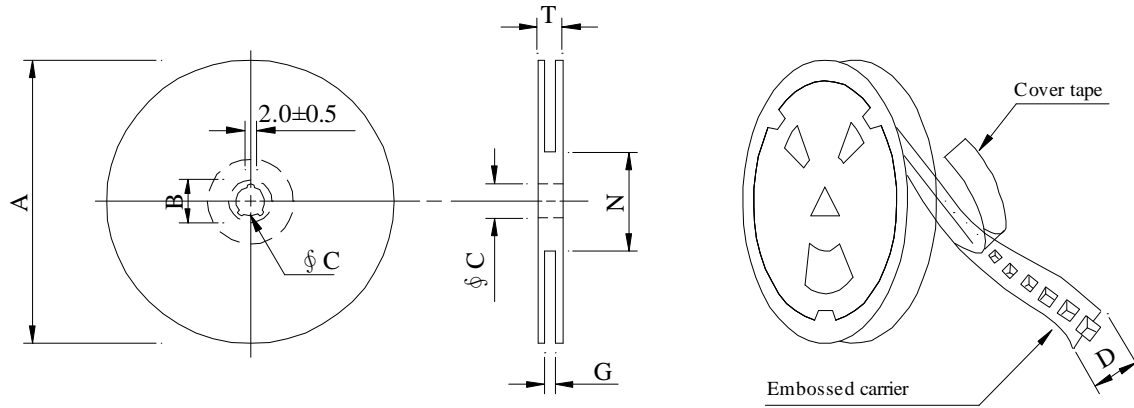
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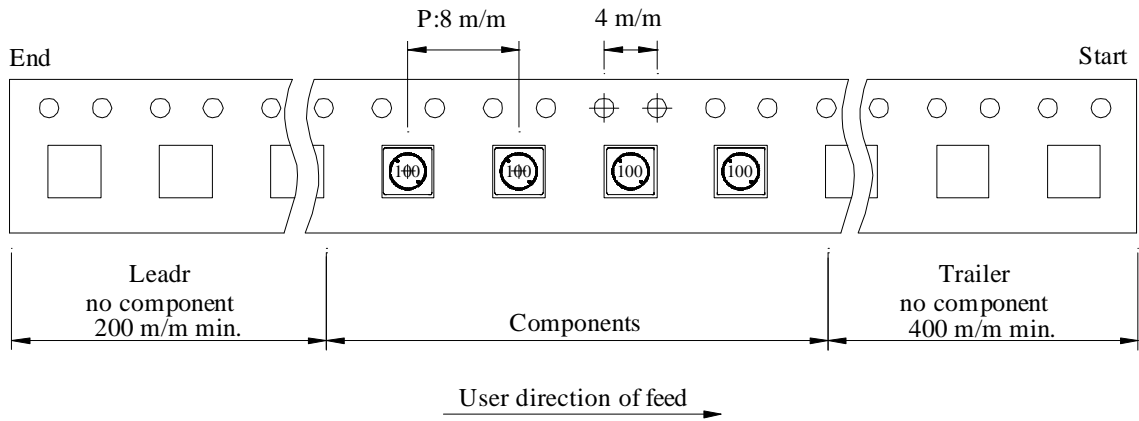
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VI . PACKAGING INFORMATION :

(1) Configuration



※ Carrier tape width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 12	178	21±0.8	13	12	14 ⁺⁰	50 ⁻⁰	16.5

(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)
SH4022	800	135	07 - 12	32,000	8.20	42 x 41 x 24

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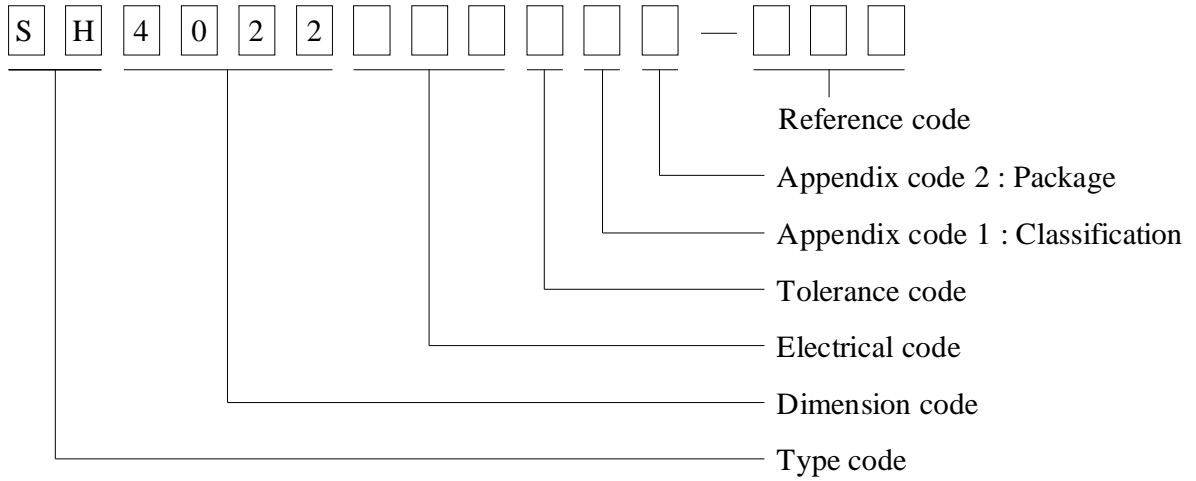
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VII . DWGING NUMBER EXPRESSION :



Appendix code 1 : Product Classification

- L : Lead Free Standard products comply with RoHS' requirements
- 1 ~ 9 : Lead Free Special products comply with RoHS' requirements

Appendix code 2 : Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T.B.D.	T.B.D.	
B	T / R (Reel package)	800 pcs	

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VIII . 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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IX . 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
EW	---	Polyesterimide	---	---	---	220
EW-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 Polyester	---	---	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 LZI.
 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 聚声电子, 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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OBMW2/E174837
September 8, 2000



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OBMW2 October 06, 2005
 Magnet Wire-Component

ELEKTRISOLA (MALAYSLA) SDN BHD E143312
 JALAN DAMAI SATU JANDA BAIK 28750 BENTONG, PAHANG
 DARUL MAKMUR MALAYSIA

Mtl Dsg	Mark Dsg	Coating Type		ANSI Typ	Temp Class
		BC	OC		
Estersol 180	E180	Polyesterimide (solderable)	—	MW-77	180
Amldester 200	A200	Polyesterimide	—	MW-74	200
Polysol-N 155	PN155	Polyurethane	Nylon	MW-80, MW-28	155, 130
Polysol 155	P155, G155	Polyurethane	—	MW-79, MW-75	155, 130
Polysol 155g	Pg155	Polyurethane	—	MW-75	130
Polysol 155p	Pp155, Gp155	Polyurethane	—	MW-79	155
Polysol 160	P160	Polyurethane	—	MW-79	155
Polysol 180	P180, G180	Polyurethane	—	MW-82, MW-79	180, 155
Polysol 170	P170 or G170	Polyurethane	—	MW-79	155
Polysol-N 180	PN180	Polyurethane	Nylon	MW-83	180
Polysol P155p	P155p	Polyurethane	—	MW-79	155

Marking : Company name, material designation or marked designation and factory identification on package ok reel

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