

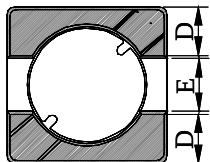
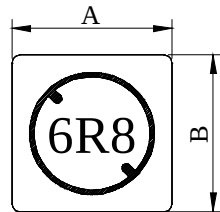
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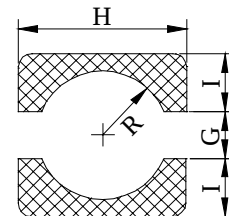
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SH4018□□□□L□
		ABC'S ITEM NO.	

I . CONFIGURATION & DIMENSIONS :

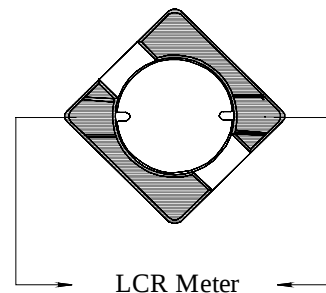
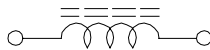


A	: 4.80±0.2	m/m
B	: 4.80±0.2	m/m
C	: 1.80±0.2	m/m
D	: 1.60 typ.	m/m
E	: 1.60 typ.	m/m
G	: 1.50 ref.	m/m
H	: 5.30 ref.	m/m
I	: 2.00 ref.	m/m
R	: 1.80 ref.	m/m



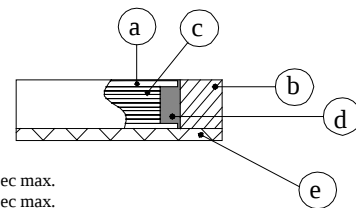
(PCB Pattern suggestion)

II . SCHEMATIC DIAGRAM :



III . MATERIALS :

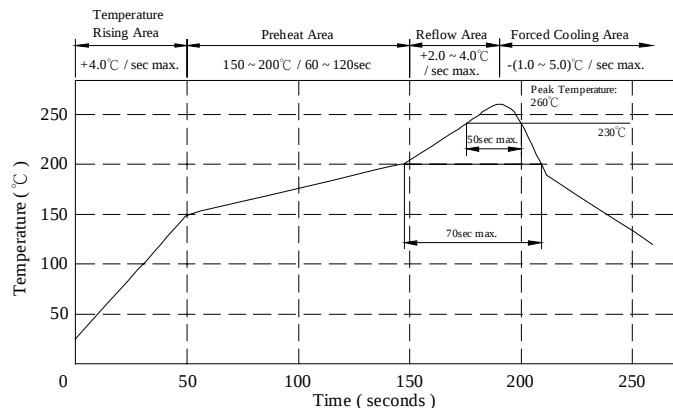
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire (Class F)
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Lead content 200ppm max.
include ferrite



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 (μ H)	SRF (MHz) typ.	RDC (m Ω)		I _{rms} (mA) max.	Isat (mA) typ.
			typ.	max.		
SH40181R0YL□	1.0 $\pm$ 30%	219	25	35	2700	2600
SH40181R8YL□	1.8 $\pm$ 30%	105	43	58	2350	2200
SH40182R7YL□	2.7 $\pm$ 30%	78	45	60	2030	1950
SH40183R3YL□	3.3 $\pm$ 30%	61	49	65	1950	1800
SH40183R9YL□	3.9 $\pm$ 30%	60	55	75	1820	1650
SH40184R7YL□	4.7 $\pm$ 30%	55	62	82	1720	1500
SH40185R6YL□	5.6 $\pm$ 30%	57	70	90	1640	1250
SH40186R8YL□	6.8 $\pm$ 30%	49	78	100	1500	1150
SH40188R2YL□	8.2 $\pm$ 30%	40	102	135	1400	1100
SH4018100YL□	10.0 $\pm$ 30%	38	114	150	1300	1000
SH4018120YL□	12.0 $\pm$ 30%	32	130	170	1150	900
SH4018150YL□	15.0 $\pm$ 30%	30	174	220	1030	820
SH4018180YL□	18.0 $\pm$ 30%	30	224	280	920	750
SH4018220YL□	22.0 $\pm$ 30%	29	240	300	880	650
SH4018270YL□	27.0 $\pm$ 30%	23	286	370	770	600
SH4018330YL□	33.0 $\pm$ 30%	21	324	420	730	500
SH4018390YL□	39.0 $\pm$ 30%	19	420	540	640	480
SH4018470YL□	47.0 $\pm$ 30%	20	450	600	620	450
SH4018560YL□	56.0 $\pm$ 30%	15	643	820	520	400
SH4018680YL□	68.0 $\pm$ 30%	13	670	860	500	380
SH4018820YL□	82.0 $\pm$ 30%	13	935	1200	430	320
SH4018101YL□	100.0 $\pm$ 30%	12	1050	1350	400	300

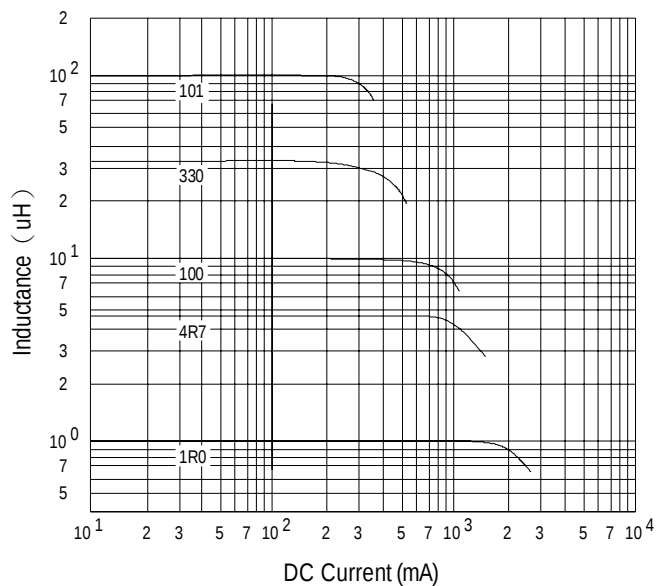
1). □: Packaging Information... ☐ Bulk ☐ Taping Reel

2). Inductance Test Freq. : 100KHz /0.1V

3). I_{rms} base on Temp. rise 30°C max.

4). Isat base on $\Delta L/L0A=35\%$ typ.

@ Inductance VS. DC Current Curve



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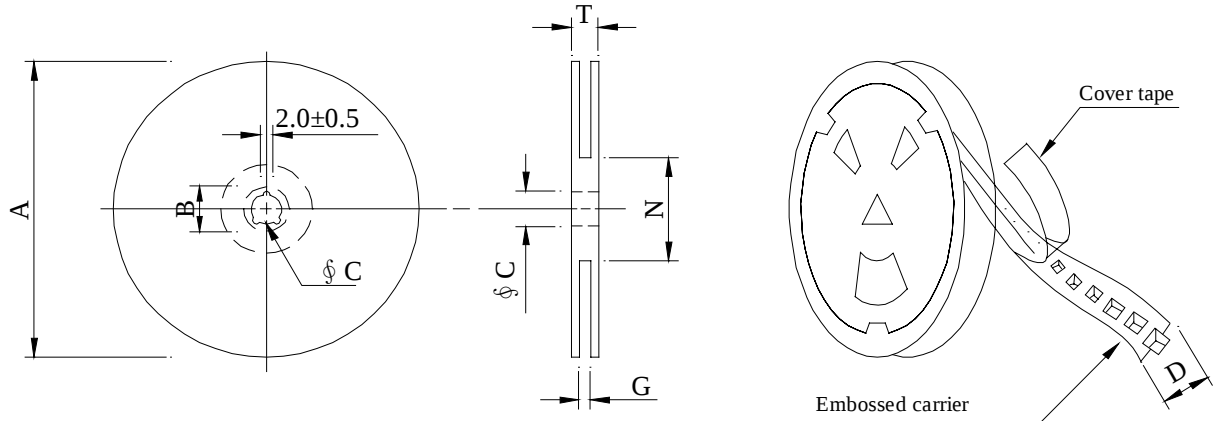
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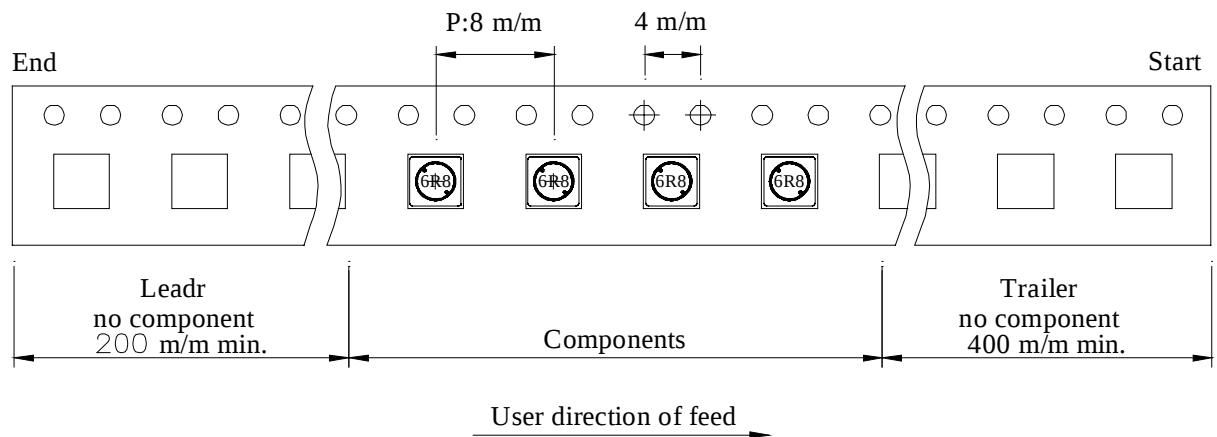
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VI . PACKAGING INFORMATION :

(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)
SH4018	800	135	07 - 12	32,000	8.20	42 x 41 x 24

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ABC 千如電子集團
ABC ELECTRONICS GROUP.

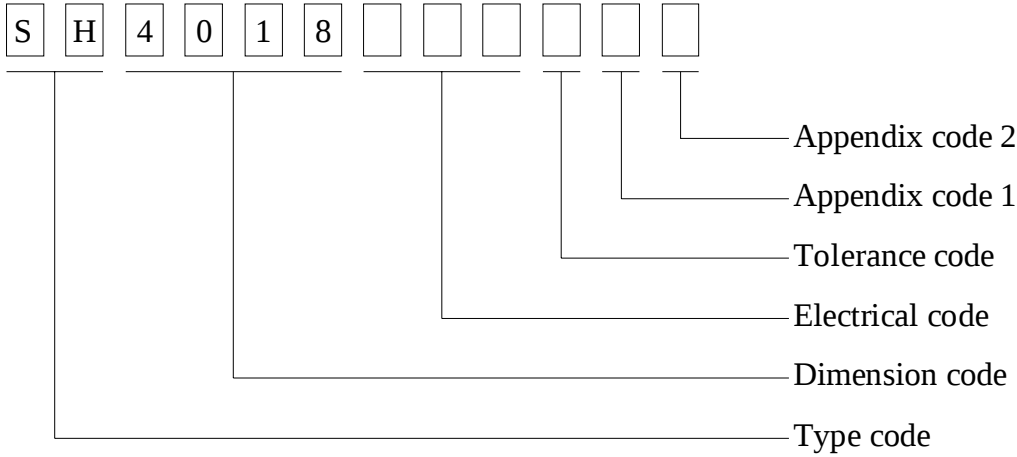
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VII . DWG EXPRESSION :



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)	800 pcs	

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VIII . RELIABILITY TEST :

Test item	Specification	Test condition
Solderability	More than 90% of the terminal electrode Shall be covered With fresh solder.	Preheat : $150\pm 25^{\circ}\text{C}$ for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : $235\pm 5^{\circ}\text{C}$ Flux : Rosin Dip time : 4 ± 1 seconds
Thermal shock test (Temp. cycle)	Inductance shall not change more than $\pm 20\%$	Room temp. $\longrightarrow$ $-25\pm 2^{\circ}\text{C}$ 15 minutes 30 minutes Room temp. $\longrightarrow$ $85\pm 2^{\circ}\text{C}$ 15 minutes 30 minutes Total : 50 cycles
Humidity Resistance test		Temperature : $40\pm 2^{\circ}\text{C}$ Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours
High temp. Resistance test		Temperature : $105\pm 2^{\circ}\text{C}$ Applied current : Per spec. Time : 500 hours

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NAME	POWER INDUCTOR	ABC'S ITEM NO.	

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
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

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 magnd wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signi-
fies 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.