

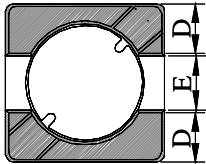
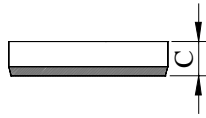
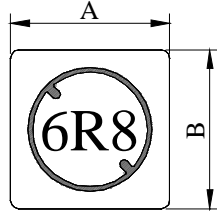
SPECIFICATION FOR APPROVAL

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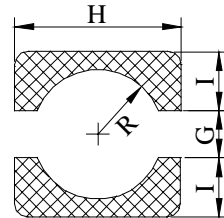
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SH3018□□□□L□
		ABC'S ITEM NO.	

I . CONFIGURATION & DIMENSIONS :

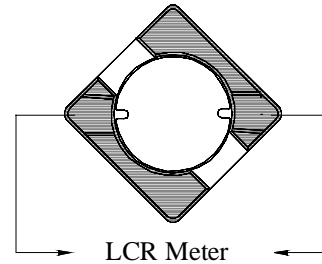
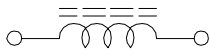


- A : 3.80±0.30 m/m
- B : 3.80±0.30 m/m
- C : 1.65±0.15 m/m
- D : 1.30 typ. m/m
- E : 1.20 typ. m/m
- G : 1.10 ref. m/m
- H : 4.30 ref. m/m
- I : 1.60 ref. m/m
- R : 1.30 ref. m/m



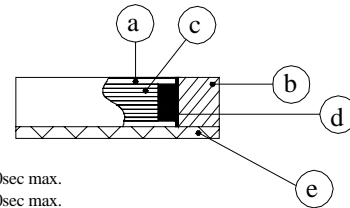
(PCB Pattern suggestion)

II . SCHEMATIC DIAGRAM :



III . MATERIALS :

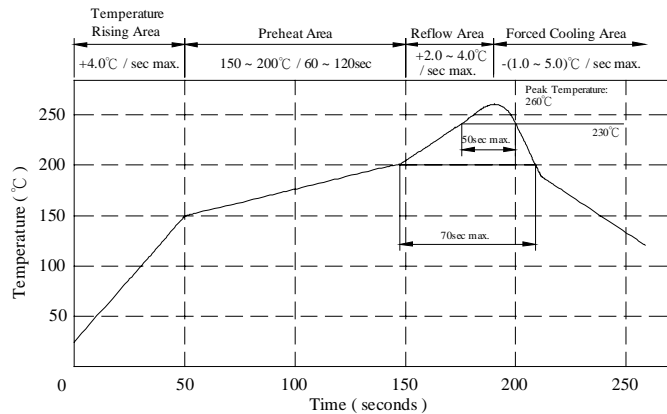
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire (class F)
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Lead content 200ppm max.
include ferrite



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. : -25°C ----+105°C
- d . Resistance to solder heat : 260°C.10 secs.



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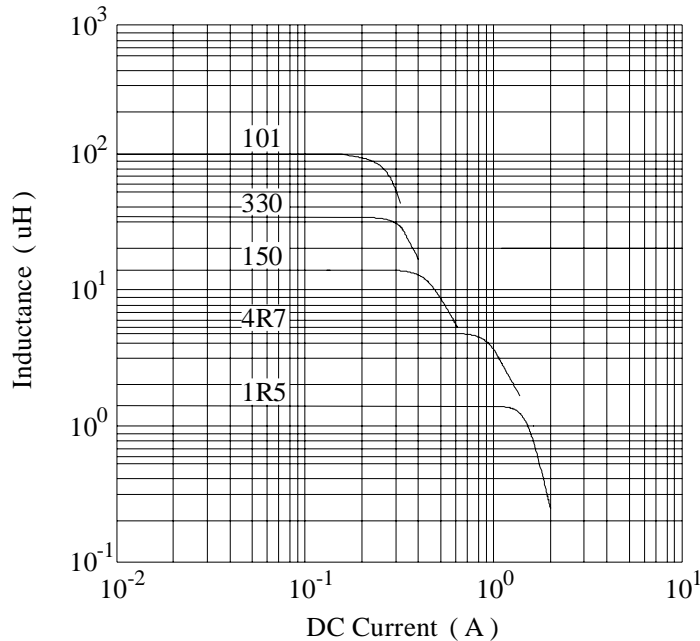
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V . ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance (μ H)	RDC (m Ω)		Irms (mA) max.	Isat (mA) typ.
		max.	typ.		
SH30181R5YL□	1.5 \pm 30%	47	35	1750	1550
SH30182R5YL□	2.5 \pm 30%	58	45	1450	1250
SH30183R6YL□	3.6 \pm 30%	85	65	1380	1100
SH30184R7YL□	4.7 \pm 30%	105	85	1200	900
SH30186R8YL□	6.8 \pm 30%	156	125	850	750
SH3018100YL□	10.0 \pm 30%	205	165	740	560
SH3018150YL□	15.0 \pm 30%	285	230	620	450
SH3018220YL□	22.0 \pm 30%	450	360	510	360
SH3018330YL□	33.0 \pm 30%	660	545	420	320
SH3018470YL□	47.0 \pm 30%	1000	800	390	250
SH3018680YL□	68.0 \pm 30%	1450	1200	320	220
SH3018101YL□	100.0 \pm 30%	2400	2050	250	180

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

@ Inductance VS. DC Superposition Characteristics



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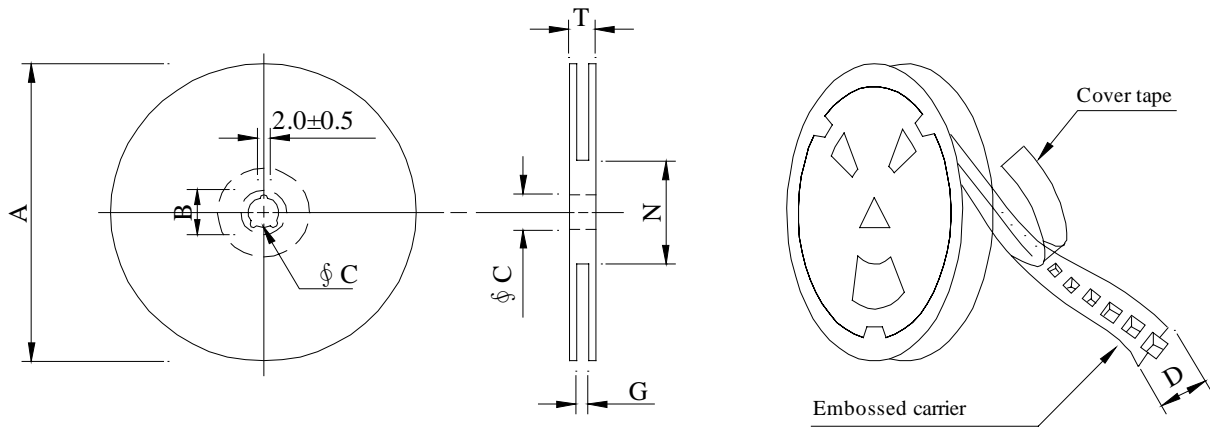
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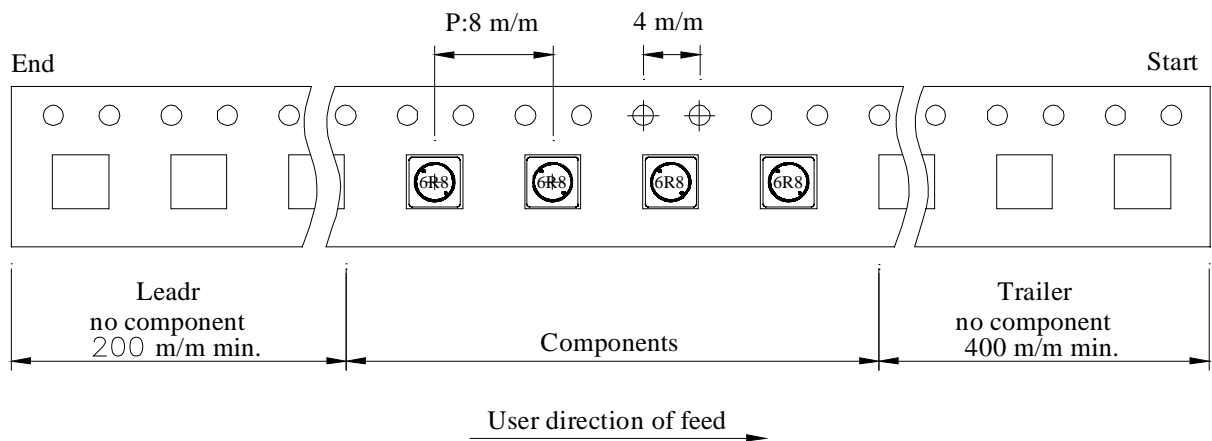
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VI . PACKAGING INFORMATION :

(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)
SH3018	1,000	150	07 - 12	40,000	8.50	42 x 41 x 24

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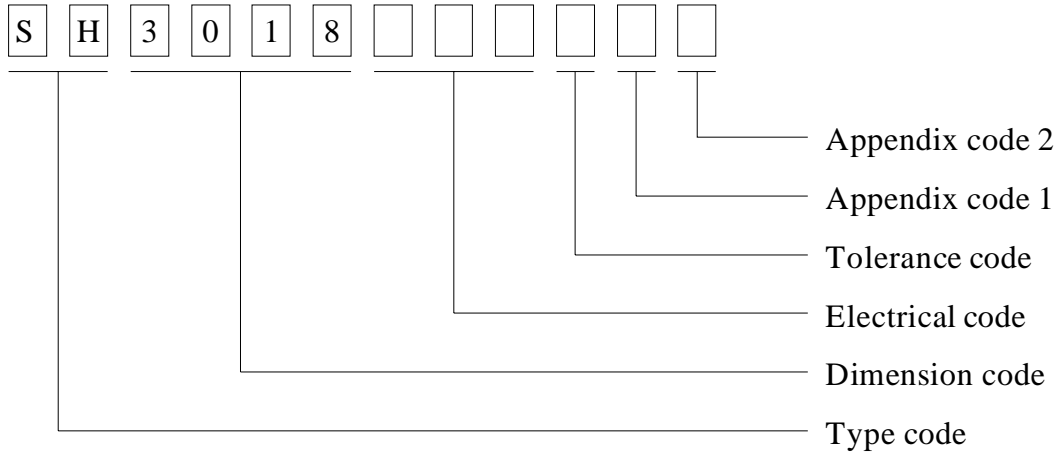
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VII . DWG EXPRESSION :



- 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)	1,000 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±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 ±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;">-25±2 °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;">85±2 °C 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. 15 minutes	—————>	-25±2 °C 30 minutes	Room temp. 15 minutes	—————>	85±2 °C 30 minutes
Room temp. 15 minutes		—————>	-25±2 °C 30 minutes					
Room temp. 15 minutes		—————>	85±2 °C 30 minutes					
Humidity Resistance test		Temperature : 40±2°C Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours						
High temp. Resistance test	Temperature : 105±2°C Applied current : Per spec. Time : 500 hours							

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		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

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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

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OBMW2E174837
September 8, 2000

@ - 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 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.