

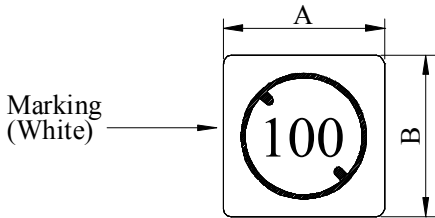
# SPECIFICATION FOR APPROVAL

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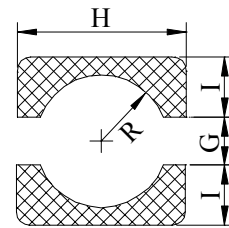
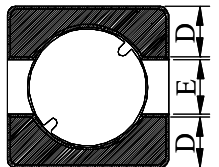
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SH3011□□□□2□-□□□
		ABC'S ITEM NO.	

**. CONFIGURATION & DIMENSIONS :**

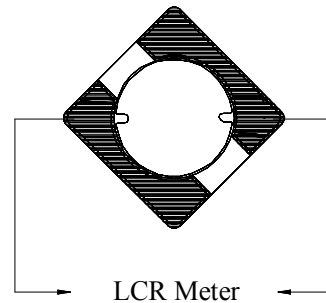
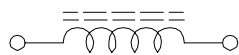


- A : 3.80 ±0.30 m/m
- B : 3.80 ±0.30 m/m
- C : 1.15 ±0.15 m/m
- D : 1.30 typ. m/m
- E : 1.20 typ. m/m
- G : 1.10 ref. m/m
- H : 4.30 ref. m/m
- I : 1.60 ref. m/m
- R : 1.30 ref. m/m



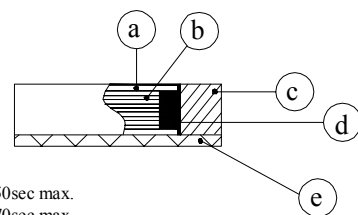
( PCB Pattern Suggestion )

**. SCHEMATIC DIAGRAM :**



**. MATERIALS :**

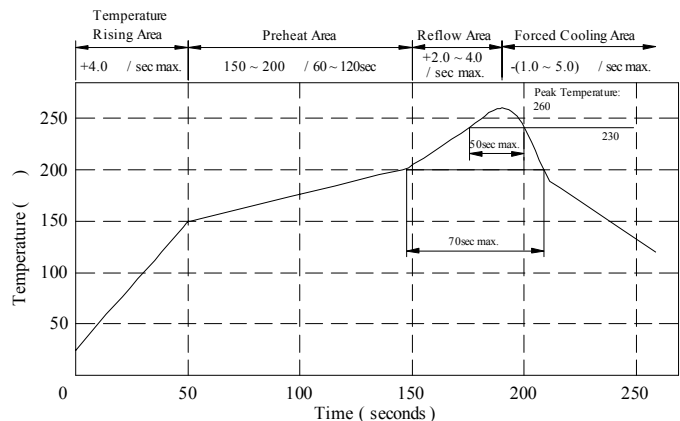
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire ( Class F )
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Products comply with RoHS' requirements



Peak Temp : 260 max.  
 Max time above 230 : 50sec max.  
 Max time above 200 : 70sec max.

**. GENERAL SPECIFICATION :**

- a . Temp. rise : 40 typ.
- b . Storage temp. : -40 ----+125
- c . Operating temp. : -40 ----+105
- d . Resistance to solder heat : 260 .10 secs.



AR-001A

# SPECIFICATION FOR APPROVAL

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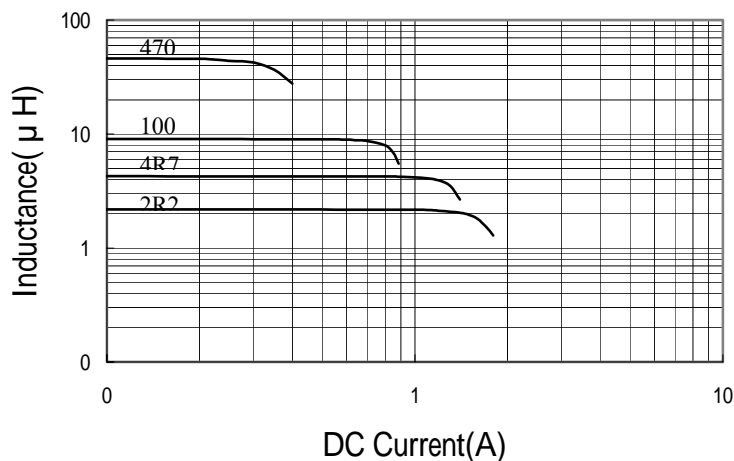
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		ABC'S ITEM NO.	

. ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance ( $\mu$ H)	Q ref.	Test Freq. ( MHz )	SRF ( MHz ) typ.	RDC ( m $\Omega$ )		Irms ( mA ) typ.	Isat ( mA ) typ.
					typ.	max.		
SH30111R5Y2□-□□□	1.5 $\pm$ 30 %	7	7.96	130	68	88	1900	1800
SH30112R2Y2□-□□□	2.2 $\pm$ 30 %	7	7.96	120	105	135	1600	1600
SH30113R3Y2□-□□□	3.3 $\pm$ 30 %	6	7.96	100	130	170	1400	1400
SH30114R7Y2□-□□□	4.7 $\pm$ 30 %	7	7.96	80	185	240	1200	1150
SH30116R8Y2□-□□□	6.8 $\pm$ 30 %	6	7.96	70	270	340	1000	970
SH3011100Y2□-□□□	10.0 $\pm$ 30 %	6	2.52	50	415	520	800	700
SH3011150Y2□-□□□	15.0 $\pm$ 30 %	6	2.52	40	720	900	650	620
SH3011220Y2□-□□□	22.0 $\pm$ 30 %	6	2.52	30	1150	1450	540	500
SH3011330Y2□-□□□	33.0 $\pm$ 30 %	6	2.52	25	1550	1900	440	380
SH3011470Y2□-□□□	47.0 $\pm$ 30 %	4	2.52	20	2400	2750	350	300

- 1) . □ : Packaging Information... **A** : Bulk   **B** : Taping Reel
- 2) ."-□□□":Reference code
- 3) . Inductance Test Freq. : 100KHz / 0.1V
- 4) . Isat base on L / LOA=35% typ.
- 5) . Irms base on Temp. rise 40   typ.

Inductance VS. DC Current curve



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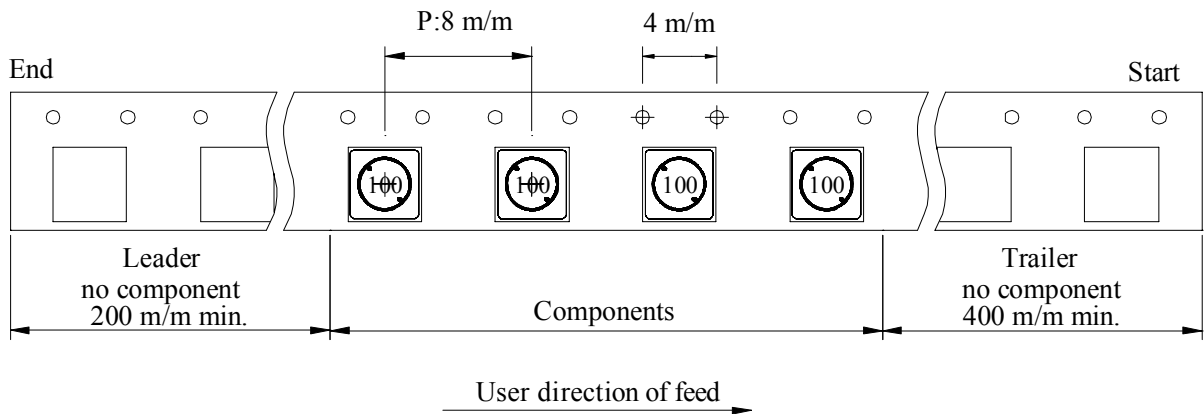
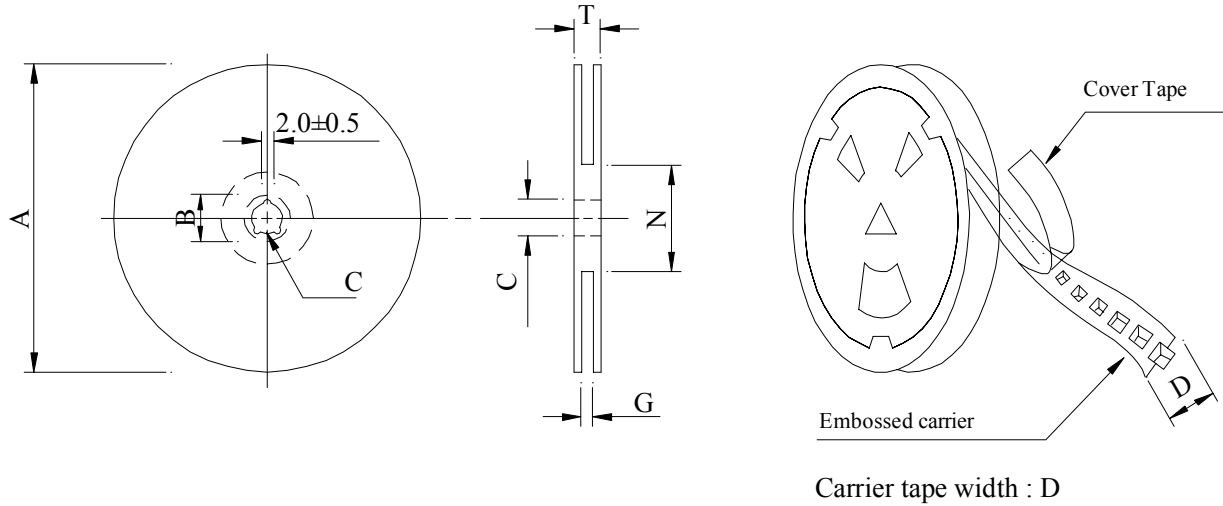
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**PACKAGING INFORMATION :**

( 1 ) Configuration



( 2 ) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 12	178	21±0.8	13	12	14 <sup>+0</sup>	50 <sup>-0</sup>	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)
SH3011	1,200	108	07 - 12	48,000	5.3	42 x 41 x 24

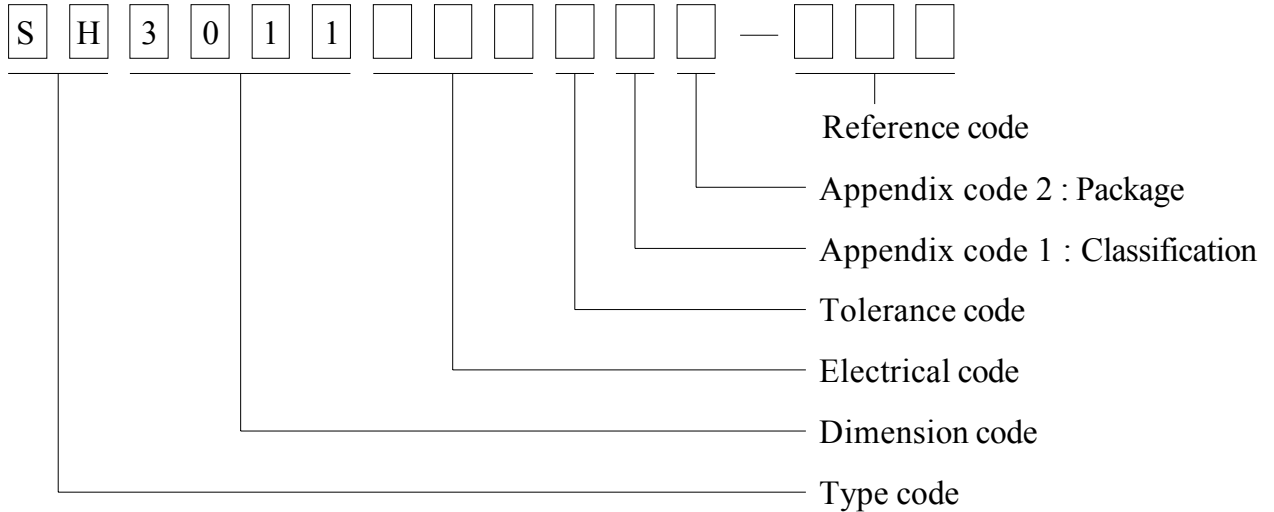
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. DWGING NUMBER EXPRESSION :



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 )	1,200 pcs	

# SPECIFICATION FOR APPROVAL

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**. RELIABILITY TEST :**

Test item	Specification	Test condition						
Solderability	More than 90% of the terminal electrode shall be covered With fresh solder.	Preheat : 150±25 for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 235±5 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 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 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. 15 minutes	→	-25±2 30 minutes	Room temp. 15 minutes	→	85±2 30 minutes
Room temp. 15 minutes		→	-25±2 30 minutes					
Room temp. 15 minutes		→	85±2 30 minutes					
Humidity Resistance test		Temperature : 40±2 Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours						
High temp. Resistance test	Temperature : 105±2 Applied current : Per spec. Time : 500 hours							

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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
LFFW	---	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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A not-for-profit organization dedicated to public safety and 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

@-May be suffixed by LZ; # - May be suffixed by LZ, EL or LZI.  
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 **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.

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OBMW2E174837  
September 8, 2000