

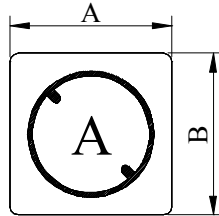
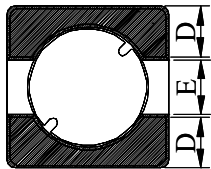
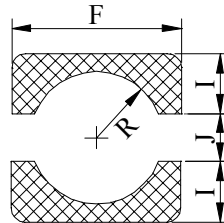
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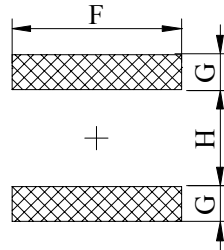
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SH2013□□□□L□-□□□
		ABC'S ITEM NO.	

I . CONFIGURATION & DIMENSIONS :



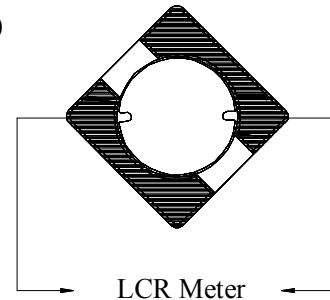
or



(PCB Pattern Suggestion)

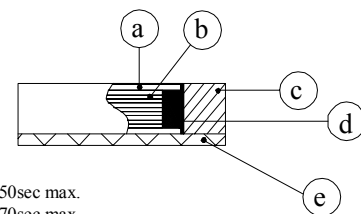
A	: 2.60 ±0.20	m/m
B	: 2.60 ±0.20	m/m
C	: 1.35 ±0.15	m/m
D	: 0.80 typ	m/m
E	: 0.90 typ	m/m
F	: 2.90 ref	m/m
G	: 0.70 ref	m/m
H	: 1.70 ref	m/m
I	: 1.00 ref	m/m
J	: 0.90 ref	m/m
R	: 0.90 ref	m/m

II . SCHEMATIC DIAGRAM :



III . MATERIALS :

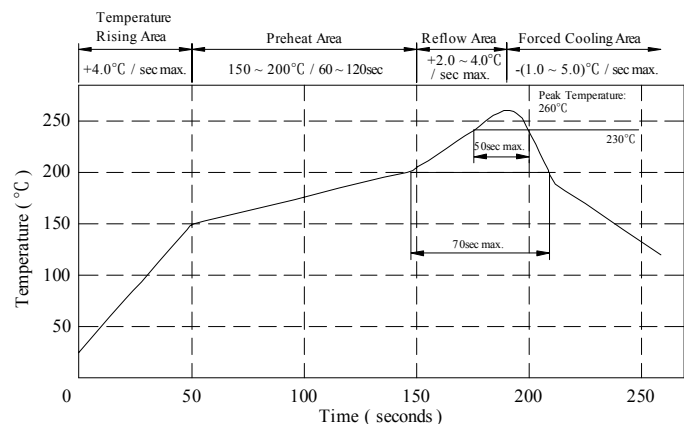
- a . Core : Ferrite DR core
- b . Core : Ferrite RI core
- c . Wire : Enamelled copper wire (Class H)
- d . Adhesive : Epoxy resin
- e . Terminal : Ag/Ni/Sn
- f . Remark : Products comply with RoHS' requirements



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 : 40°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)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC ($m\Omega$)		Irms (mA) max.	Isat (mA) typ.	Marking
					typ.	max.			
SH20131R0YL□-□□□	$1.0 \pm 30 \%$	7	7.96	230	45	60	2100	1080	A
SH20132R2YL□-□□□	$2.2 \pm 30 \%$	7	7.96	120	75	100	1600	590	C
SH20133R3YL□-□□□	$3.3 \pm 30 \%$	7	7.96	95	115	150	1250	520	E
SH20134R7YL□-□□□	$4.7 \pm 30 \%$	7	7.96	90	170	220	1100	425	F
SH20136R8YL□-□□□	$6.8 \pm 30 \%$	7	7.96	75	245	320	1000	365	G
SH2013100YL□-□□□	$10.0 \pm 30 \%$	10	2.52	60	340	445	650	300	H
SH2013150YL□-□□□	$15.0 \pm 30 \%$	10	2.52	50	500	650	550	250	I
SH2013220YL□-□□□	$22.0 \pm 30 \%$	12	2.52	35	800	1040	370	205	J
SH2013330YL□-□□□	$33.0 \pm 30 \%$	12	2.52	30	1100	1450	350	150	K
SH2013470YL□-□□□	$47.0 \pm 30 \%$	12	2.52	25	1500	1950	250	135	L

1). □ : Packaging Information... [A] : Bulk [B] : Taping Reel

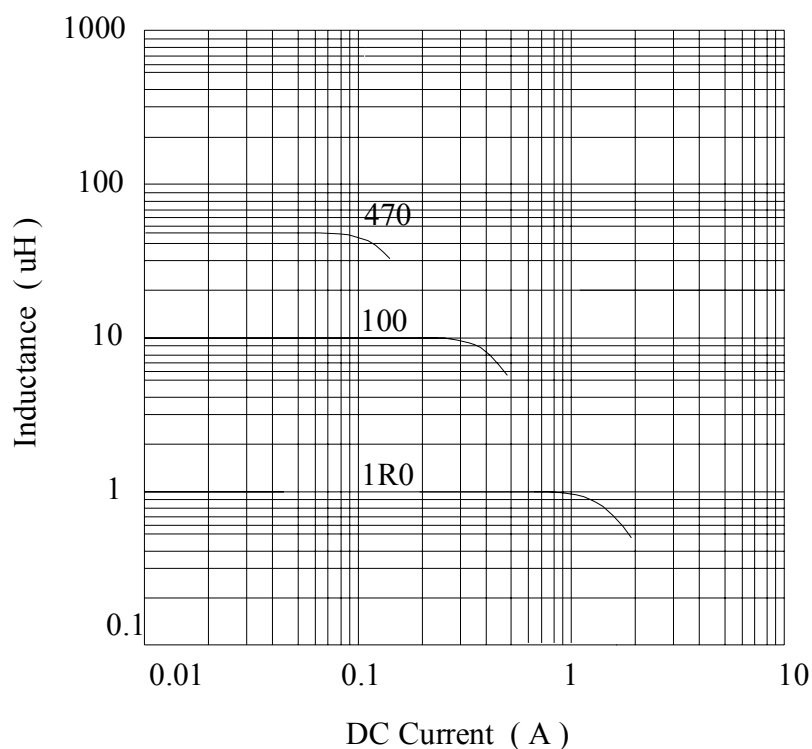
2). "- □□□ " : Reference code

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

4). Irms base on Temp. rise 40°C max.

5). Isat base on $\Delta L / LOA = 35\%$ typ.

@ Inductance VS. DC Current Curve



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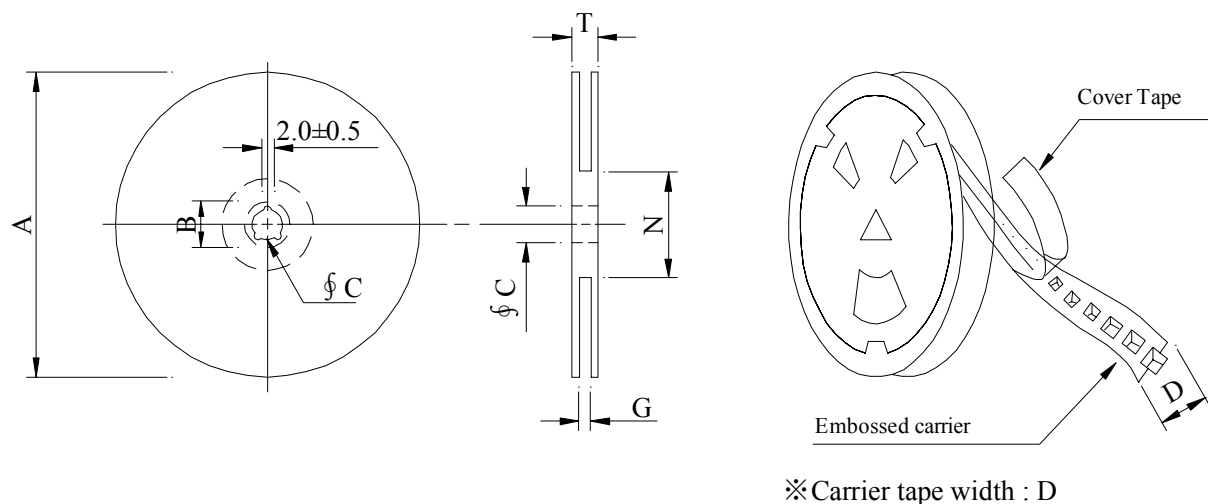
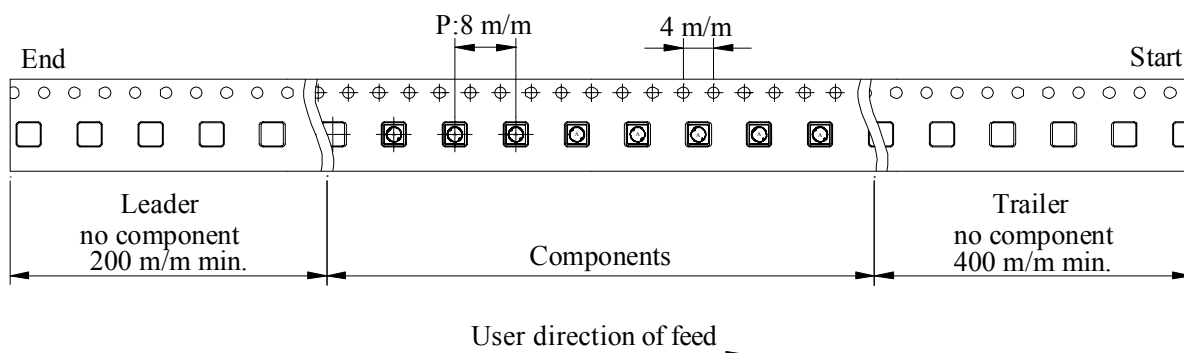
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VI . PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 12	178	21±0.8	13	12	14 ⁺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)
SH2013	1,500	120	07 - 12	60,000	4.8	42 x 41 x 24

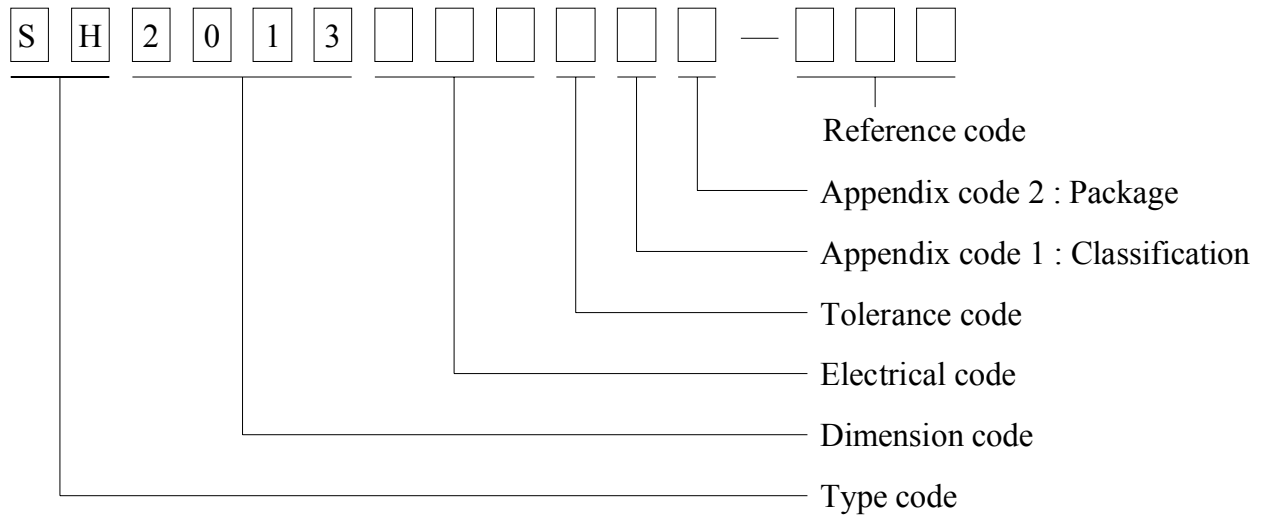
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VII . DWGING NUMBER EXPRESSION :



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)	1,500 pcs	

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NAME		ABC'S ITEM NO.	

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%	<div>Room temp. -25±2 °C</div> <div>15 minutes → 30 minutes</div> <div>Room temp. 85±2 °C</div> <div>15 minutes → 30 minutes</div> Total : 50 cycles
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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IX . UL CARD :

OBMW2
Magnet Wire-Component
ELEKTRISOLA (MALAYSLA) SDN BHD
JALAN DAMAI SATU JANDA BAIK 28750 BENTONG, PAHANG
DARUL MAKMUR MALAYSIA
E143312

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		—	MW-79	155

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

See General Information preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

AR-001A