

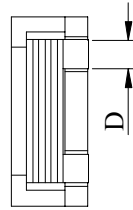
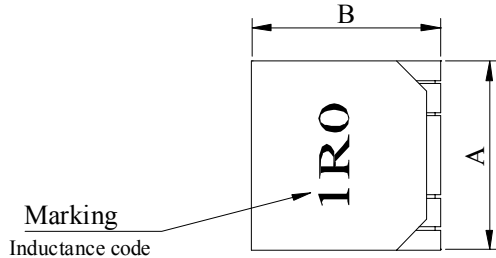
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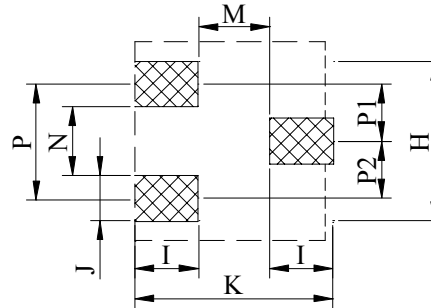
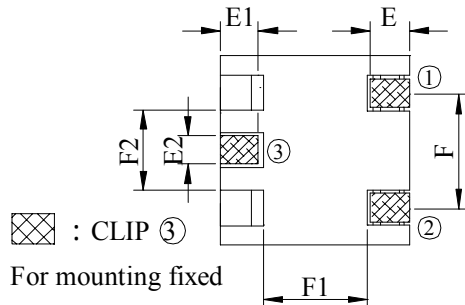
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PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SP1205□□□□L□-□□□
		ABC'S ITEM NO.	

MECHANICAL DIMENSIONS :

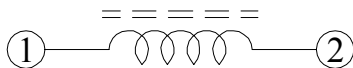


C : R30~1R0 : 5.00 max. m/m
1R8~7R2 : 5.60 max. m/m



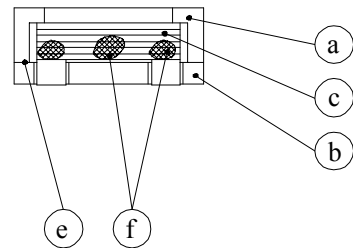
A	: 12.50±0.30	m/m
B	: 12.50±0.30	m/m
D	: 1.90±0.20	m/m
E	: 2.50 nom.	m/m
E1	: 2.00 ref.	m/m
E2	: 2.00 ref.	m/m
F	: 7.50±0.25	m/m
F1	: 6.40 ref.	m/m
F2	: 5.20 ref.	m/m
H	: 10.50 ref.	m/m
I	: 4.15 ref.	m/m
J	: 3.00 ref.	m/m
K	: 13.00 ref.	m/m
M	: 4.70 ref.	m/m
N	: 4.50 ref.	m/m
P	: 7.50 ref.	m/m
P1	: 3.75 ref.	m/m
P2	: 3.75 ref.	m/m

SCHEMATIC DIAGRAM :

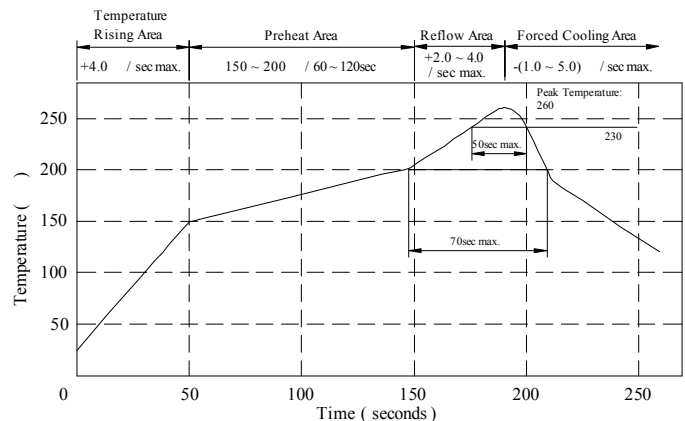


MATERIALS LIST :

- a . Core : Ferrite ER core
- b . Core : Ferrite SB core
- c . Wire : Ultra-fine rectangular
Enamelled copper wire (class F)
- d . Clip : Cu/Sn
- e . Adhesive : Epoxy resin
- f . Adhesive : Epoxy resin
- g . 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 max.
- b . Storage temp. : -40 ~ +125
- c . Operating temp. : -40 ~ +105
- d . Resistance to solder heat : 260 . 10 secs.

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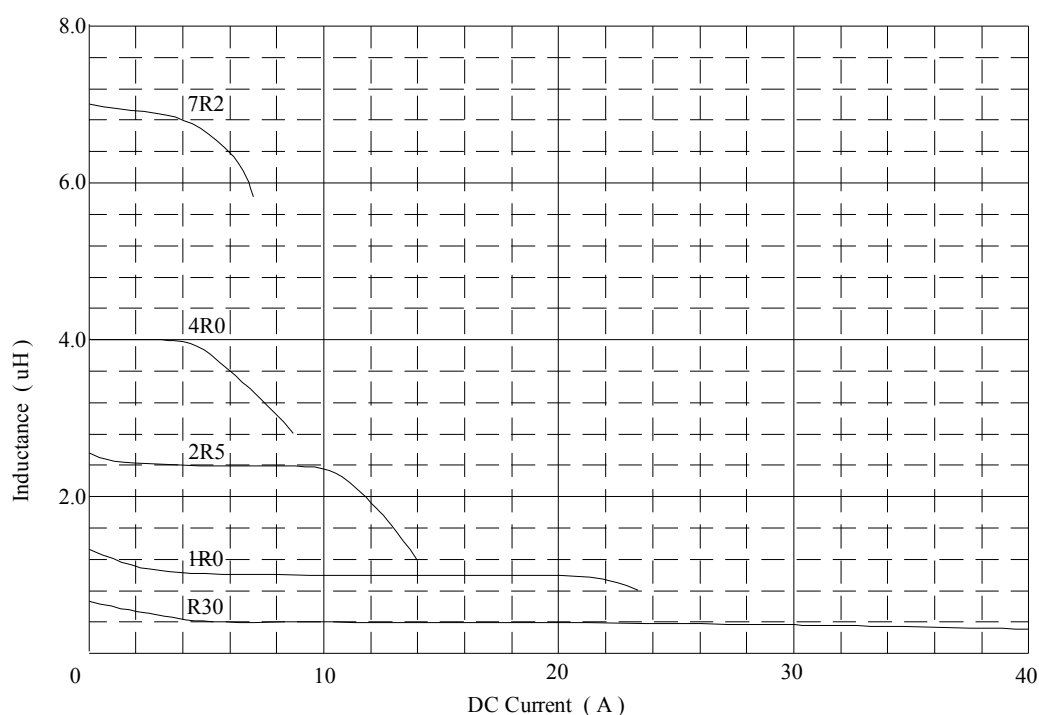
PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG NO.	SP1205□□□□L□-□□□
		ABC'S ITEM NO.	

. ELECTRICAL CHARACTERISTICS :

DWG No.	Initial Inductance L0 (uH)	Inductance at flat point L1 (uH)	Flat point ref. (A)	Irms (A)	Isat (A)	DC Resistance (mΩ)	
						max.	typ.
SP1205R30YL□-□□□	0.54±25%	0.30±25%	5.00	38.0	35.0	1.8	0.8
SP1205R60YL□-□□□	0.85±25%	0.60±25%	5.00	28.0	27.0	2.5	1.5
SP12051R0YL□-□□□	1.25±25%	1.00±25%	5.00	23.0	22.0	3.4	2.8
SP12051R8YL□-□□□	2.00±25%	1.80±25%	2.00	20.0	16.0	3.4	2.5
SP12052R5YL□-□□□	2.70±25%	2.50±25%	2.00	18.0	12.0	3.4	2.5
SP12053R3YL□-□□□	3.50±25%	3.30±25%	2.00	16.0	11.8	5.4	4.3
SP12054R0YL□-□□□	4.20±25%	4.00±25%	3.00	15.0	8.3	5.4	4.3
SP12055R6YL□-□□□	5.80±25%	5.60±25%	2.00	12.0	8.0	11.4	9.2
SP12057R2YL□-□□□	7.40±25%	7.20±25%	2.00	10.0	7.5	13.5	10.5

- 1). □ : Packaging Information... ☐ Bulk ☐ Taping Reel
- 2). "-□□□":Reference code
- 3). Measured frequency of inductance is 100 KHz / 1V
- 4). Isat base on inductance drop 20% typ. of L1 value
- 5). Irms base on temp. rise 40 max.

@ Inductance VS. DC Superposition Charateristics



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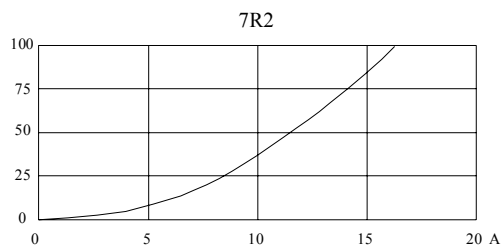
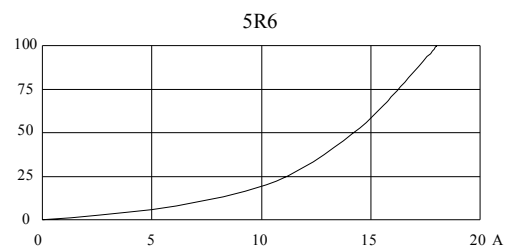
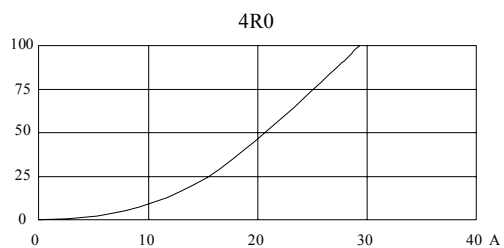
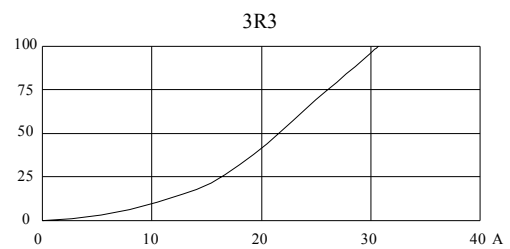
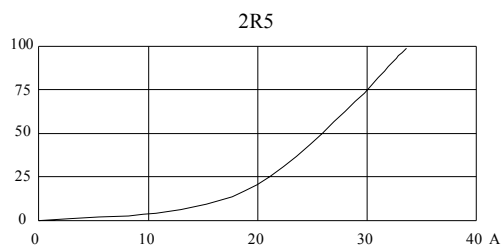
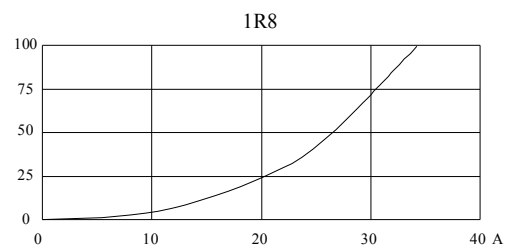
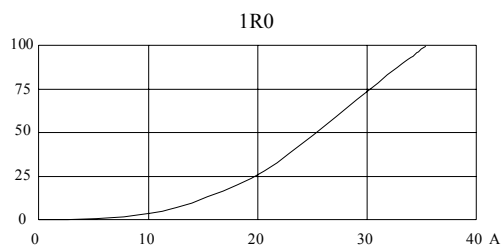
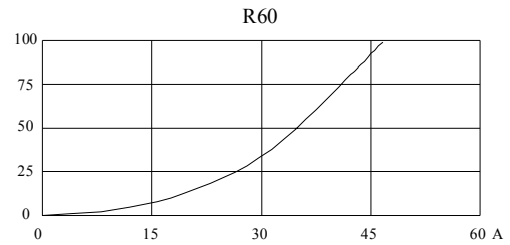
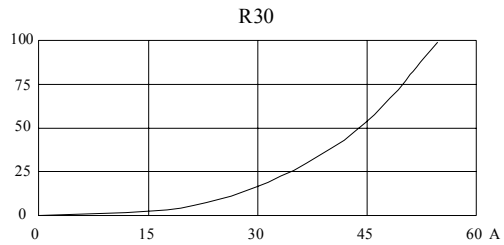
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@ DC Current VS Temperature Rise



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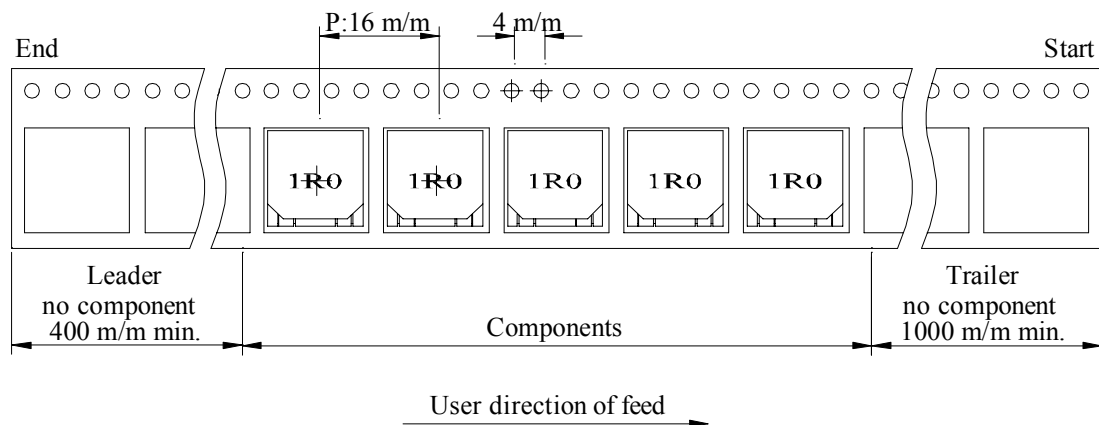
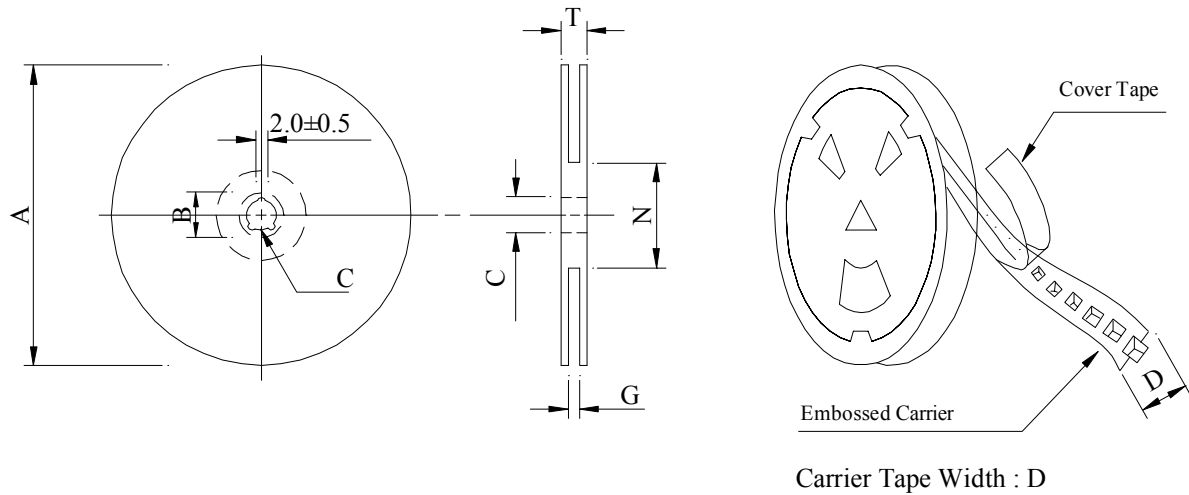
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PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	50 ⁻⁰	30.4

(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)
SP1205	600	2,150	13 - 24	2,400	11.30	40 x 40 x 24

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PROD.	SHIELDED SMD	ABC'S DWG NO.	SP1205□□□□L□-□□□
NAME	POWER INDUCTOR	ABC'S ITEM NO.	

. DWGING NUMBER EXPRESSION :

The diagram illustrates a 12-digit code structure. The digits are represented by boxes, with the first five containing 'S', 'P', '1', '2', and '0'. The remaining seven boxes are empty. Brackets and lines below the boxes group them into six categories:

- Type code:** Digit 1 (S)
- Dimension code:** Digits 2 and 3 (P, 1)
- Electrical code:** Digits 4 and 5 (2, 0)
- Tolerance code:** Digit 6 (empty)
- Appendix code 1 : Classification:** Digits 7 and 8 (empty, empty)
- Appendix code 2 : Package:** Digits 9 and 10 (empty, empty)
- Reference code:** Digits 11 and 12 (empty, empty)

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)	600 pcs	

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NAME	POWER INDUCTOR	ABC'S ITEM NO.	

. 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%	Room temp. —————> -25±2 15 minutes 30 minutes Room temp. —————> 85±2 15 minutes 30 minutes Total : 50 cycles
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		January 7, 1988		
Component-Magnet Wire		E104048 (S)		
MITSUBISHI CABLE INDUSTRIES LTD				
4-3 IKEJIRI ITAMI , HYOGO 664 JAPAN				
Mtl		Coat Typ	ANSI	Temp
Dsg	BC	Oyercoat	Type	Class
EDW-R52	Medis	Ester-imide	—	155

Marking : Company name and type designation on package or reels.

See General Information Preceding These Recognitions.

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

Report : January 5, 1988.

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