

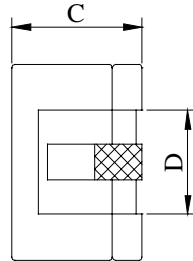
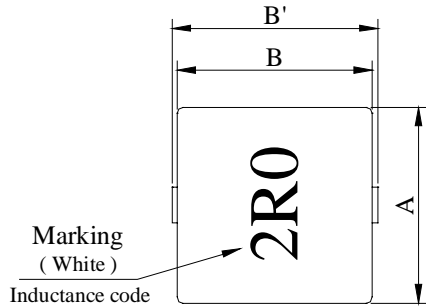
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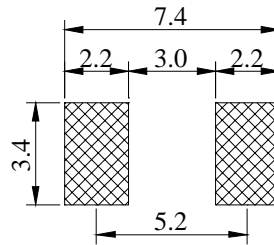
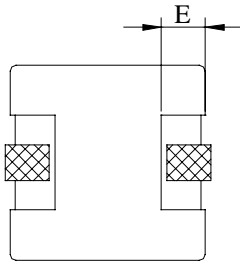
PAGE: 1

PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG No. ABC'S ITEM No.	SP6045□□□□L□
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I . MECHANICAL DIMENSIONS :

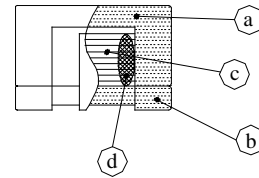
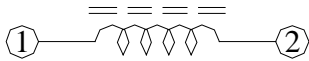


- A : 6.60±0.30 m/m
- B : 6.60±0.30 m/m
- B' : 7.00±0.30 m/m
- C : 4.50±0.30 m/m
- D : 3.20 typ. m/m
- E : 1.50 typ. m/m



(PCB Pattern)

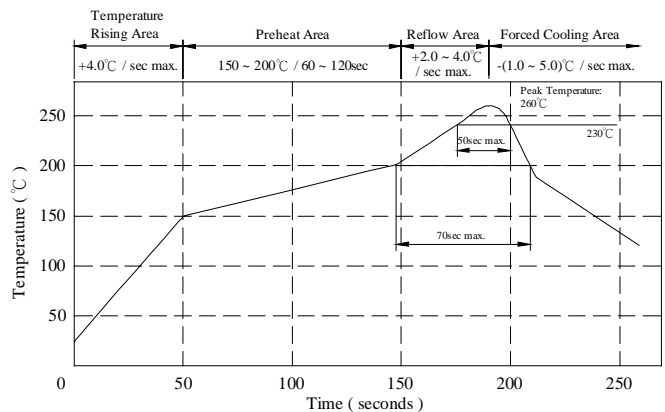
II . SCHEMATIC DIAGRAM :



III . MATERIALS LIST :

- a . Core : Iron ER core
- b . Core : Iron I core
- c . Wire : Ultra-fine rectangular
Enamelled copper wire
- d . Adhesive : Epoxy resin
- e . Remark : Lead content 200ppm max.
include iron

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



IV . GENERAL SPECIFICATION :

- a . Storage temp. : -55°C ~ +125°C
- b . Operating temp. : -55°C ~ +125°C
(Temp. rise included)
- c . Resistance to solder heat : 260°C. 10 secs.

AE-001A

SPECIFICATION FOR APPROVAL

REF :

PAGE: 2

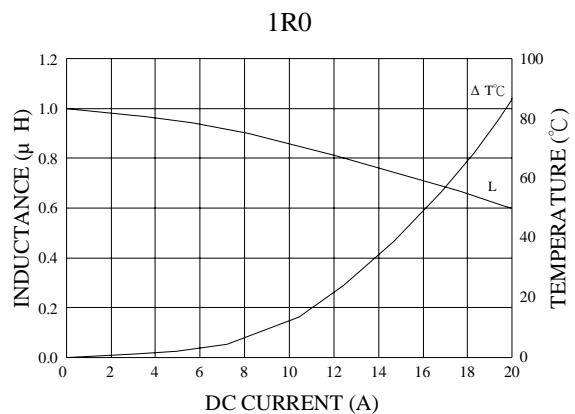
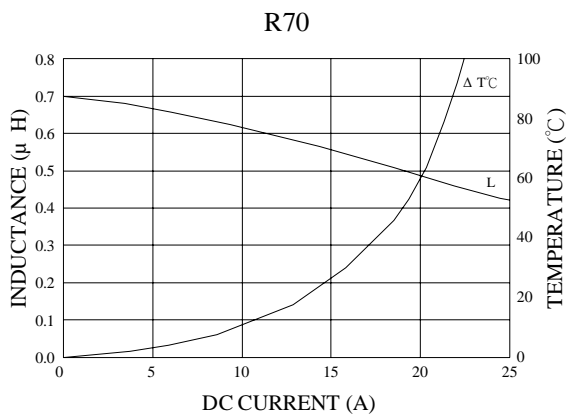
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V . ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance L (μ H)	Isat (A)	Irms (A)	RDC ($m\Omega$)	
				max.	typ.
SP6045R70YL□	0.70 \pm 25 %	15.0	16.0	4.8	3.7
SP60451R0YL□	1.00 \pm 25 %	12.0	13.0	6.0	4.6
SP60451R5YL□	1.50 \pm 25 %	10.0	11.0	6.9	5.3
SP60452R0YL□	2.00 \pm 25 %	8.0	9.0	10.7	8.2
SP60452R5YL□	2.50 \pm 25 %	7.0	8.4	11.8	9.1
SP60453R0YL□	3.00 \pm 25 %	6.3	6.6	17.3	13.3
SP60453R9YL□	3.90 \pm 25 %	6.0	6.2	19.1	14.7
SP60454R5YL□	4.50 \pm 25 %	5.4	5.8	20.8	16.0

- 1). □ : Packaging information .. [A] : Bulk [B] : Taping Reel
- 2). Measured frequency of inductance is 100 KHz / 1V
- 3). Isat base on inductance drop 25% typ. of L value at 20°C
- 4). Irms base on temp. rise 40°C typ.

@ Performance Graphs



AE-001A

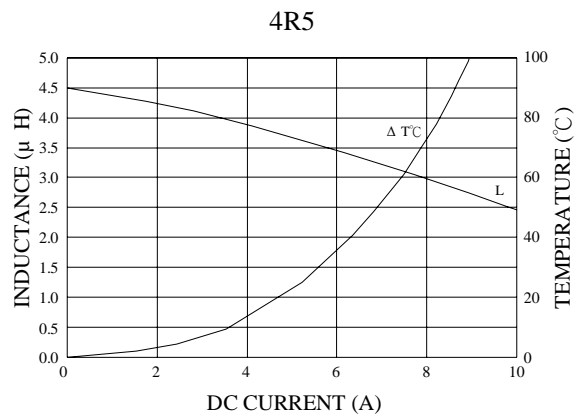
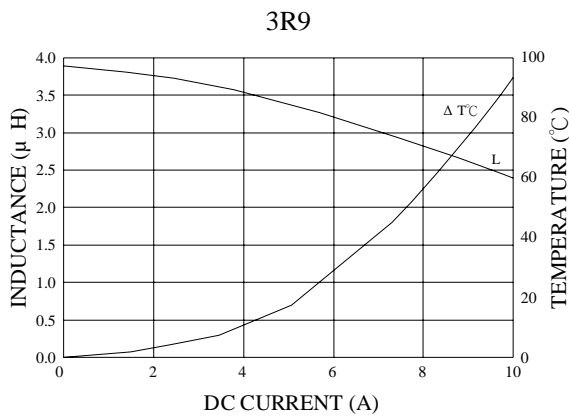
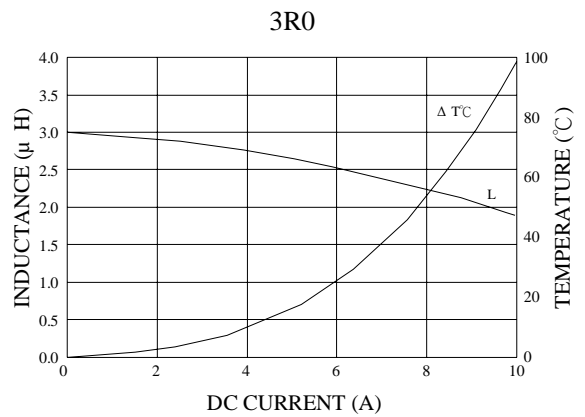
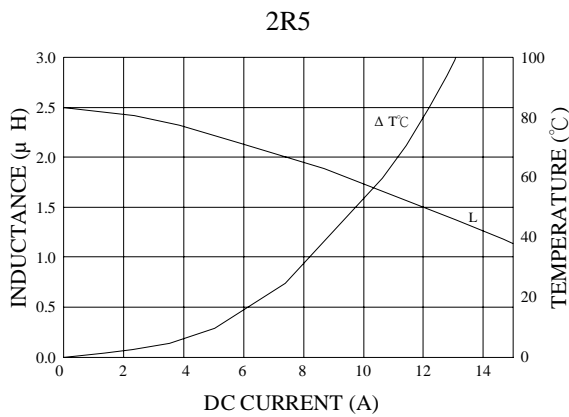
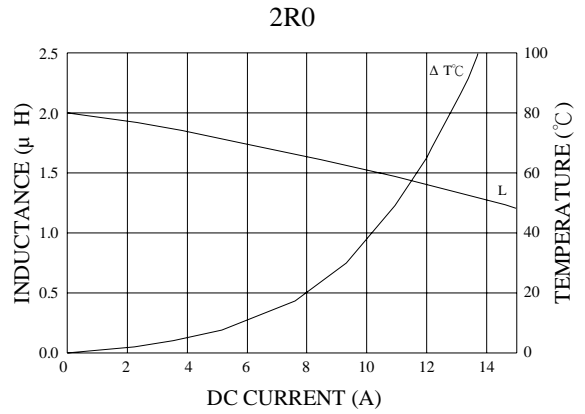
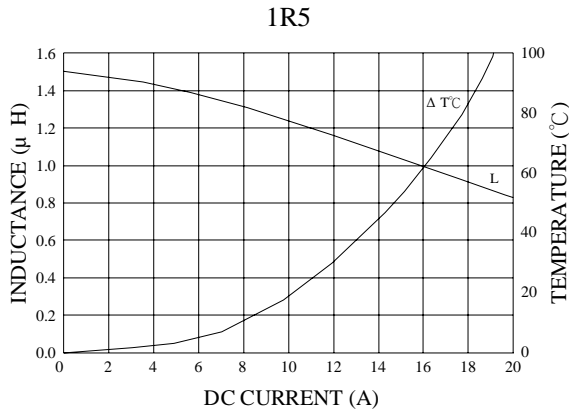
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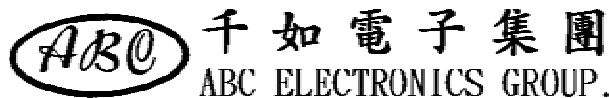
PAGE: 3

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@ Performance Graphs



AE-001A



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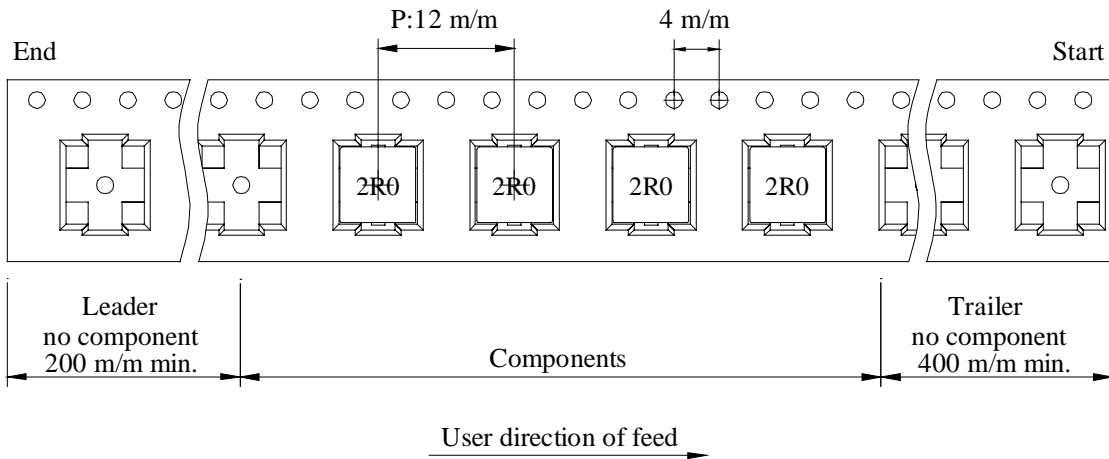
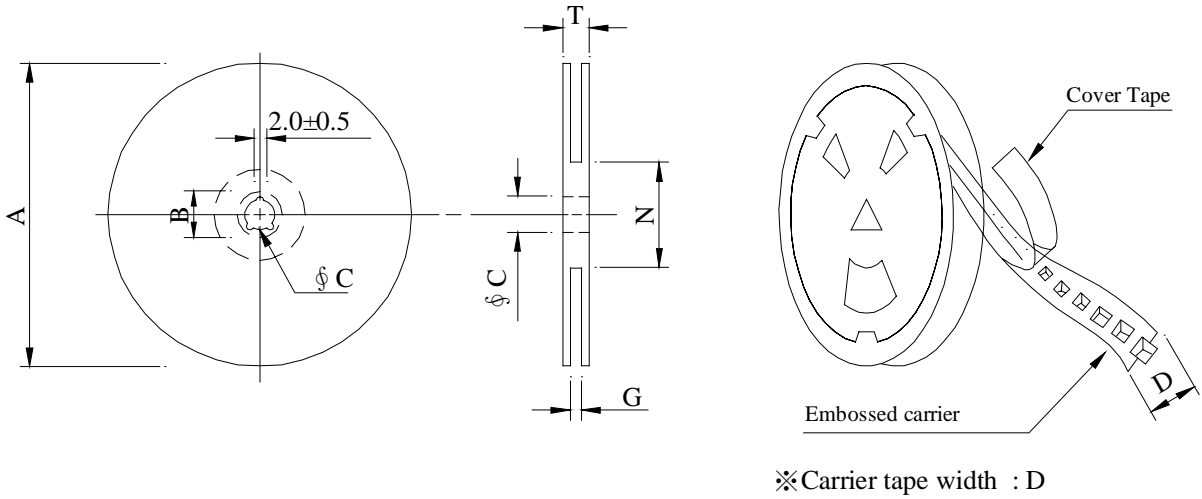
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PAGE: 4

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VI . PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	16	18 ⁺⁰	50 ⁻⁰	22.4

(3) QTY & G.W. Per package

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SP6045	1000	1,200	13 - 16	6,000	9.50	40 x 40 x 24

AE-001A

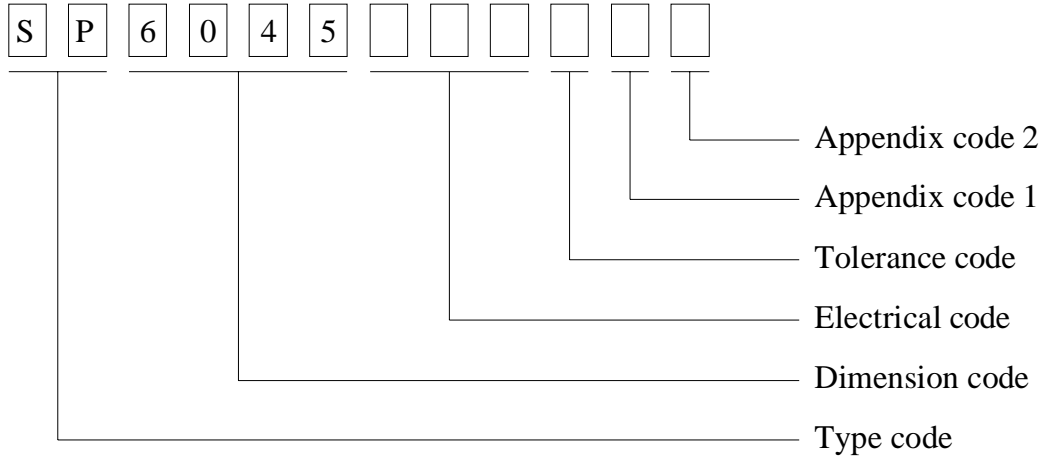
SPECIFICATION FOR APPROVAL

REF :

PAGE: 5

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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)	1000 pcs	

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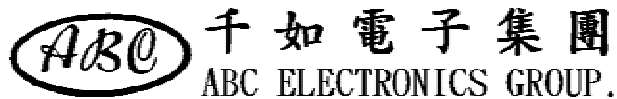
PAGE: 6

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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 : 85±2°C Applied current : Per spec. Time : 500 hours							

AE-001A



SPECIFICATION FOR APPROVAL

REF :

PAGE: 7

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		ABC'S ITEM No.	

IX . 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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AE-001A