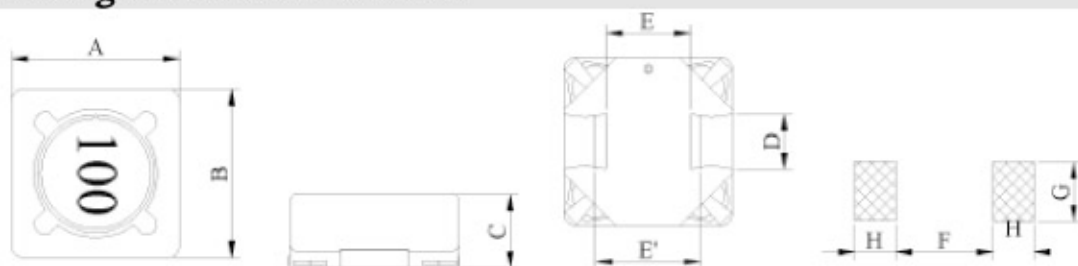


### 1. Configuration & Dimensions



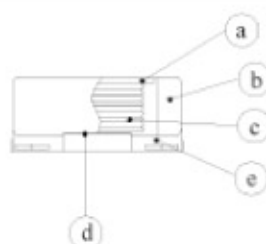
Series	Dimensions [mm]								
	A	B	C	D(typ.)	E(typ.)	E'(typ.)	F(typ.)	G(ref.)	H(ref.)
PS0703	7.30±0.2	7.30±0.2	3.50±0.2	2.00	4.60	4.90	4.80	2.40	1.50
PS0704	7.30±0.2	7.30±0.2	4.50±0.2	2.00	4.60	4.90	4.80	2.40	1.50

### 2. Schematic Diagram



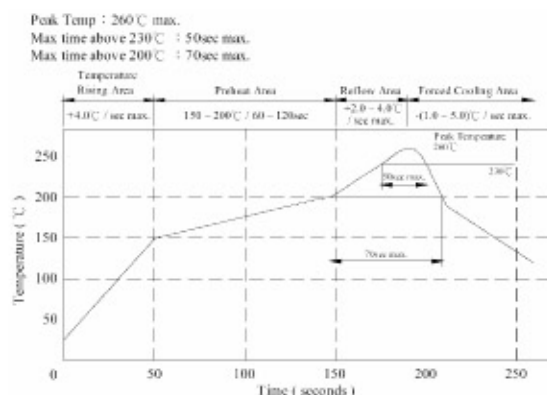
### 3. Materials

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



### 4. General Specification

- a.- Temp. rise : 40°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



### 5. Electrical Characteristics

#### PS0703 (10 $\mu$ H – 1000 $\mu$ H)

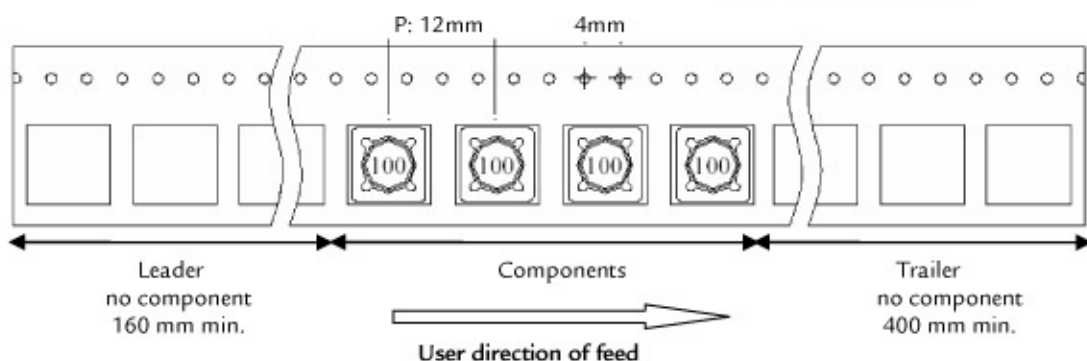
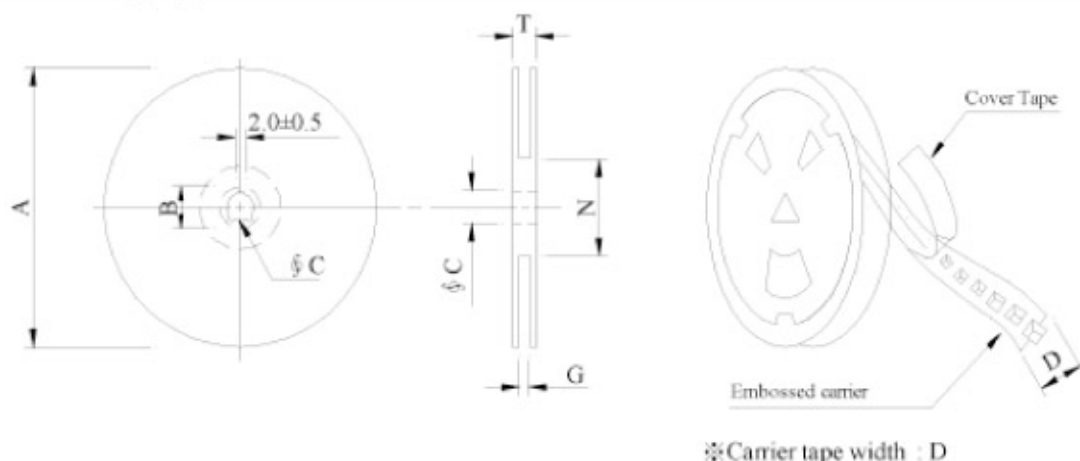
DWG No.	Inductance ( $\mu$ H)	Test Freq. L (KHz)	RDC ( $\Omega$ ) max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
PS0703 - 100M	10.0 $\pm$ 20%	1	0.072	2.10	1.85
PS0703 - 120M	12.0 $\pm$ 20%	1	0.085	1.90	1.60
PS0703 - 150M	15.0 $\pm$ 20%	1	0.105	1.60	1.52
PS0703 - 180M	18.0 $\pm$ 20%	1	0.125	1.40	1.40
PS0703 - 220M	22.0 $\pm$ 20%	1	0.160	1.20	1.28
PS0703 - 270M	27.0 $\pm$ 20%	1	0.185	1.10	1.15
PS0703 - 330M	33.0 $\pm$ 20%	1	0.220	1.00	1.04
PS0703 - 390M	39.0 $\pm$ 20%	1	0.250	0.95	0.96
PS0703 - 470M	47.0 $\pm$ 20%	1	0.320	0.85	0.88
PS0703 - 560M	56.0 $\pm$ 20%	1	0.350	0.78	0.80
PS0703 - 680M	68.0 $\pm$ 20%	1	0.400	0.72	0.74
PS0703 - 820M	82.0 $\pm$ 20%	1	0.480	0.63	0.65
PS0703 - 101M	100.0 $\pm$ 20%	1	0.630	0.54	0.60
PS0703 - 121M	120.0 $\pm$ 20%	1	0.720	0.53	0.55
PS0703 - 151M	150.0 $\pm$ 20%	1	0.930	0.47	0.48
PS0703 - 181M	180.0 $\pm$ 20%	1	1.150	0.43	0.45
PS0703 - 221M	220.0 $\pm$ 20%	1	1.320	0.40	0.42
PS0703 - 271M	270.0 $\pm$ 20%	1	1.700	0.30	0.37
PS0703 - 331M	330.0 $\pm$ 20%	1	2.000	0.33	0.33
PS0703 - 391M	390.0 $\pm$ 20%	1	2.300	0.30	0.30
PS0703 - 471M	470.0 $\pm$ 20%	1	2.800	0.26	0.27
PS0703 - 561M	560.0 $\pm$ 20%	1	3.500	0.23	0.25
PS0703 - 681M	680.0 $\pm$ 20%	1	4.000	0.21	0.22
PS0703 - 821M	820.0 $\pm$ 20%	1	5.200	0.19	0.21
PS0703 - 102M	1000.0 $\pm$ 20%	1	5.800	0.17	0.18

### PS0704 (10 $\mu$ H - 1000 $\mu$ H)

DWG No.	Inductance ( $\mu$ H)	Test Freq. L (KHz)	RDC ( $\Omega$ ) max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
PS0704 - 100M	10.0 $\pm$ 20%	1	0.052	2.10	2.50
PS0704 - 120M	12.0 $\pm$ 20%	1	0.062	2.00	2.30
PS0704 - 150M	15.0 $\pm$ 20%	1	0.075	1.90	2.10
PS0704 - 180M	18.0 $\pm$ 20%	1	0.090	1.80	1.95
PS0704 - 220M	22.0 $\pm$ 20%	1	0.096	1.65	1.75
PS0704 - 270M	27.0 $\pm$ 20%	1	0.130	1.45	1.62
PS0704 - 330M	33.0 $\pm$ 20%	1	0.150	1.35	1.45
PS0704 - 390M	39.0 $\pm$ 20%	1	0.190	1.17	1.30
PS0704 - 470M	47.0 $\pm$ 20%	1	0.210	1.05	1.20
PS0704 - 560M	56.0 $\pm$ 20%	1	0.240	0.95	1.10
PS0704 - 680M	68.0 $\pm$ 20%	1	0.300	0.86	0.96
PS0704 - 820M	82.0 $\pm$ 20%	1	0.400	0.78	0.90
PS0704 - 101M	100.0 $\pm$ 20%	1	0.450	0.70	0.78
PS0704 - 121M	120.0 $\pm$ 20%	1	0.550	0.60	0.70
PS0704 - 151M	150.0 $\pm$ 20%	1	0.760	0.48	0.58
PS0704 - 181M	180.0 $\pm$ 20%	1	0.820	0.46	0.54
PS0704 - 221M	220.0 $\pm$ 20%	1	0.950	0.42	0.50
PS0704 - 271M	270.0 $\pm$ 20%	1	1.200	0.38	0.46
PS0704 - 331M	330.0 $\pm$ 20%	1	1.500	0.34	0.40
PS0704 - 391M	390.0 $\pm$ 20%	1	1.850	0.32	0.36
PS0704 - 471M	470.0 $\pm$ 20%	1	2.200	0.29	0.34
PS0704 - 561M	560.0 $\pm$ 20%	1	2.600	0.26	0.30
PS0704 - 681M	680.0 $\pm$ 20%	1	2.800	0.24	0.28
PS0704 - 821M	820.0 $\pm$ 20%	1	3.500	0.22	0.26
PS0704 - 102M	1000.0 $\pm$ 20%	1	4.100	0.20	0.24

[Inductance tested at 1V] [I<sub>rms</sub> base on temp. rise 40°C max.] [I<sub>sat</sub> base on  $\Delta$ L/L0A - 25% max.]

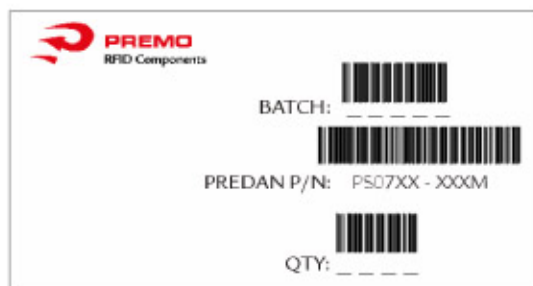
### 6. Packaging Information



Style	Dimensions [mm]						
	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	16	18 <sup>±0</sup>	50 <sup>±0</sup>	22.4

Series	Inner : Reel			Outer : Carton		
	Q'TY(pcs)	G.W.(gw)	Style	Q'TY(pcs)	G.W.(Kg)	Size(cm)
PS0703	1,500	1,250	13 - 16	9,000	17.0	40 x 40 x 24
PS0704	1,000	825	13 - 16	6,000	11.6	40 x 40 x 24

### 7. Labelling



### 8. Reliability Test

Test item	Specification	Test condition						
Solderability	More than 90% of the terminal electrode shall be covered with fresh solder	Preheat : $150 \pm 25\%$ for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : $260 \pm 5^\circ\text{C}$ Flux : Rosin Dip time : $4 \pm 1$ seconds						
Thermal shock test (Temp. cycle)	Inductance shall not change more than $\pm 20\%$	<table border="0"> <tr> <td style="text-align: center;"><u>Room temp.</u> 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;"><u><math>-25 \pm 2^\circ\text{C}</math></u> 30 minutes</td> </tr> <tr> <td style="text-align: center;"><u>Room temp.</u> 15 minutes</td> <td style="text-align: center;">→</td> <td style="text-align: center;"><u><math>85 \pm 2^\circ\text{C}</math></u> 30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	<u>Room temp.</u> 15 minutes	→	<u><math>-25 \pm 2^\circ\text{C}</math></u> 30 minutes	<u>Room temp.</u> 15 minutes	→	<u><math>85 \pm 2^\circ\text{C}</math></u> 30 minutes
<u>Room temp.</u> 15 minutes		→	<u><math>-25 \pm 2^\circ\text{C}</math></u> 30 minutes					
<u>Room temp.</u> 15 minutes		→	<u><math>85 \pm 2^\circ\text{C}</math></u> 30 minutes					
Humidity Resistance test		Temperature : $40 \pm 2^\circ\text{C}$ Humidity : 90 ~ 95% Applied current : Per specifications Time : 500 hours						
High temp. Resistance test	Temperature : $105 \pm 2^\circ\text{C}$ Applied current : Per specifications Time : 500 hours							

### 9. Edition Control

Edition	Date	Change description	Made by
1 <sup>st</sup>	31/08/06	Update Specification	Pablo Pozo