

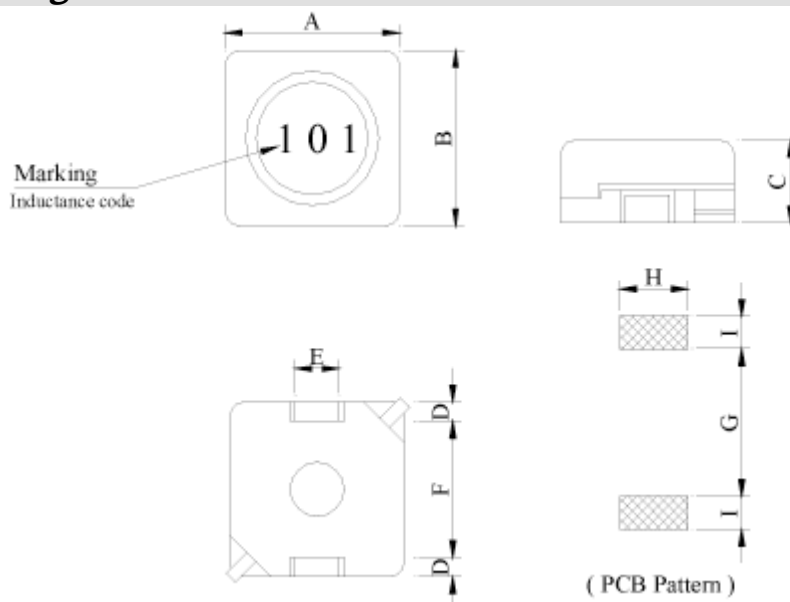
PS0603 & PS0604

SMD Power Inductors Shielded



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1. Configuration & Dimensions



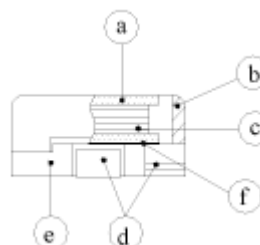
Series	Dimensions [mm]								
	A	B	C	D	E	F(typ.)	G(ref.)	H(ref.)	I(ref.)
PS0603	6.5±0.30	6.5±0.30	3.1±0.30	0.8(+0.2/-0.3)	1.6±0.2	5.0	4.3	2.5	1.5
PS0604	6.5±0.30	6.5±0.30	4.6±0.30	0.8(+0.2/-0.3)	1.6±0.2	5.0	4.3	2.5	1.5

2. Schematic Diagram



3. Materials

- a.- Core : Ferrite DR core
- b.- Core : Ferrite RI core
- c.- Wire : Enamelled copper wire (class F)
- d.- Base : LCP E4008
- e.- Adhesive : Epoxy resin
- f.- Terminal : Cu / Ni / Sn



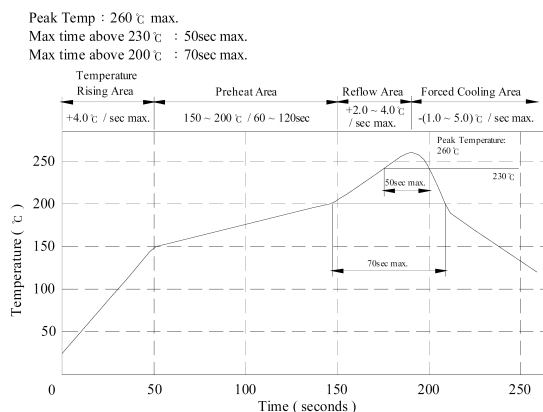
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4. General Specification

- a.- Temp. rise : 40°C max.
- b.- Rated current : Base on temp. rise
& $\Delta L/L0A = 10\%$ max.
- c.- Storage temp. : -40°C ~ +125°C
- d.- Operating temp. : -40°C ~ +105°C
- e.- Resistance to solder heat : 260°C. 10 secs



5. Electrical Characteristics

PS0603 (1.5μH - 1000μH)

DWG No.	Inductance (μH)	Test Freq. L (KHz)	RDC (Ω) max.	IDC (A) max.
PS0603 - 1R5M	1.5±20%	1	0.032	2.20
PS0603 - 2R5M	2.5±20%	1	0.040	2.00
PS0603 - 3R3M	3.3±20%	1	0.055	1.80
PS0603 - 4R7M	4.7±20%	1	0.070	1.60
PS0603 - 6R8M	6.8±20%	1	0.100	1.20
PS0603 - 100M	10.0±20%	1	0.120	1.10
PS0603 - 150M	15.0±20%	1	0.180	0.90
PS0603 - 220M	22.0±20%	1	0.270	0.70
PS0603 - 330K	33.0±10%	1	0.430	0.60
PS0603 - 470K	47.0±10%	1	0.550	0.50
PS0603 - 680K	68.0±10%	1	0.900	0.40
PS0603 - 101K	100.0±10%	1	1.500	0.30
PS0603 - 151K	150.0±10%	1	1.900	0.25
PS0603 - 221K	220.0±10%	1	2.700	0.20
PS0603 - 331K	330.0±10%	1	4.200	0.18
PS0603 - 471K	470.0±10%	1	6.700	0.15
PS0603 - 681K	680.0±10%	1	10.500	0.12
PS0603 - 102K	1000.0±10%	1	14.000	0.10

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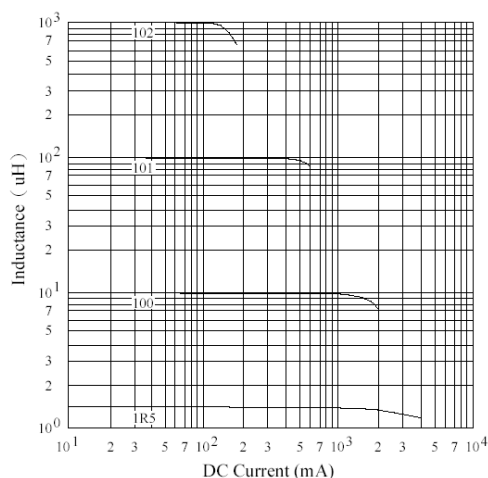
PS0604 (1.5μH – 1000μH)

DWG No.	Inductance (μH)	Test Freq. L (KHz)	RDC (Ω) max.	IDC (A) max.
PS0604 – 1R5M	1.5±20%	1	0.028	2.80
PS0604 – 2R5M	2.5±20%	1	0.035	2.50
PS0604 – 3R3M	3.3±20%	1	0.050	2.30
PS0604 – 4R7M	4.7±20%	1	0.060	2.00
PS0604 – 6R8M	6.8±20%	1	0.070	1.60
PS0604 – 100M	10.0±20%	1	0.120	1.30
PS0604 – 150M	15.0±20%	1	0.130	1.10
PS0604 – 220M	22.0±20%	1	0.190	0.90
PS0604 – 330K	33.0±10%	1	0.250	0.70
PS0604 – 470K	47.0±10%	1	0.360	0.60
PS0604 – 680K	68.0±10%	1	0.520	0.50
PS0604 – 101K	100.0±10%	1	0.650	0.40
PS0604 – 151K	150.0±10%	1	1.000	0.30
PS0604 – 221K	220.0±10%	1	1.700	0.25
PS0604 – 331K	330.0±10%	1	2.100	0.20
PS0604 – 471K	470.0±10%	1	3.300	0.18
PS0604 – 681K	680.0±10%	1	4.800	0.15
PS0604 – 102K	1000.0±10%	1	6.100	0.12

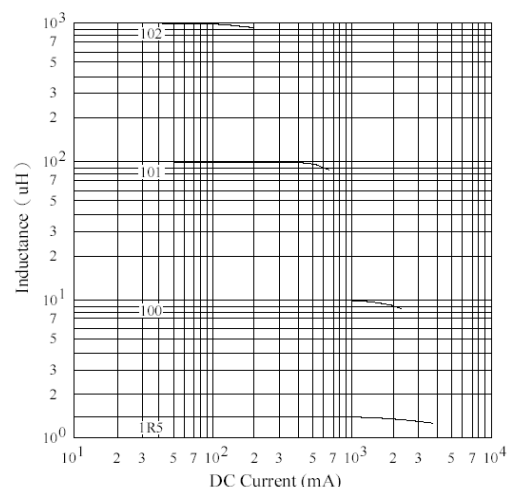
6. Curve

Inductance VS. DC Current Curve

PS0603



PS0604

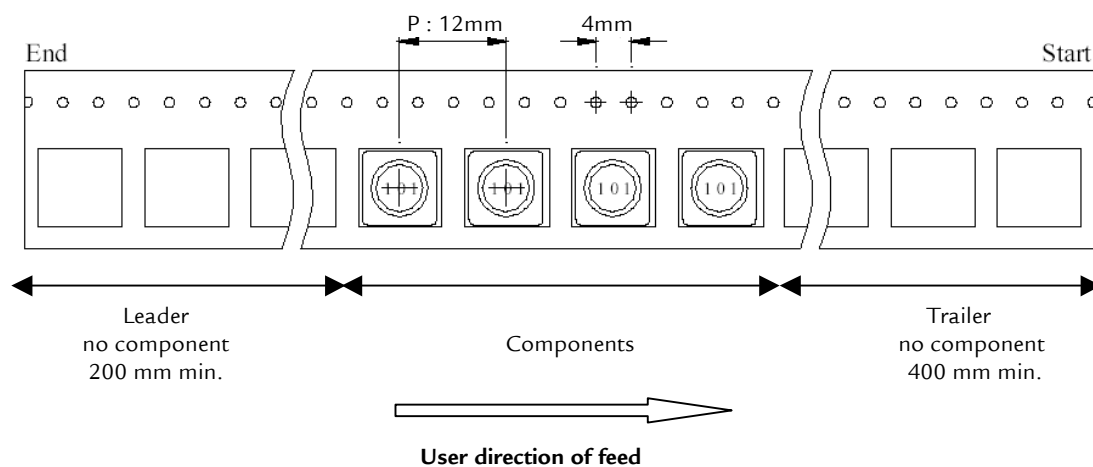


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7. Packaging Information



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

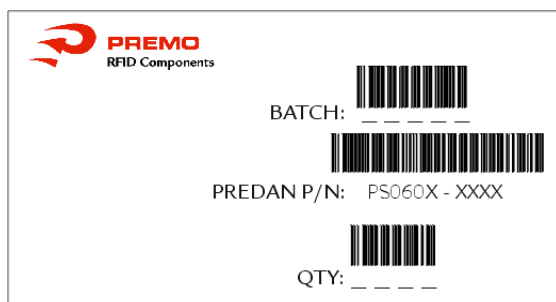
Series	Inner : Reel			Outer : Carton		
	Q'TY(pcs)	G.W.(gw)	Style	Q'TY(pcs)	G.W.(Kg)	Size(cm)
PS0603	1,000	860	13 - 16	6,000	9.5	40 x 40 x 24
PS0604	1,000	1,000	13 - 16	6,000	10.5	40 x 40 x 24

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8. Labelling



9. 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°C Flux : Rosin Dip time : 4±1 seconds
Thermal shock test (Temp. cycle)	Inductance shall not change more than ±20%	<div>Room temp. 15 minutes → -25±2°C 30 minutes</div> <div>Room temp. 15 minutes → 85±2°C 30 minutes</div> <div>Total : 50 cycles</div>
Humidity Resistance test		Temperature : 40±2°C Humidity : 90 ~ 95% Applied current : Per specifications Time : 500 hours
High temp. Resistance test		Temperature : 105±2°C Applied current : Per specifications Time : 500 hours

10. Edition Control

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