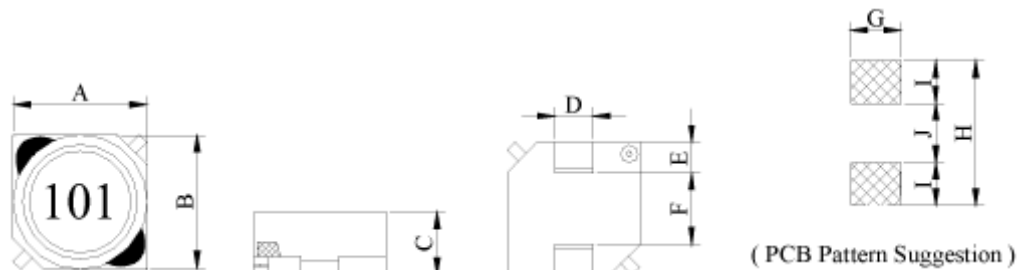


1. Configuration & Dimensions



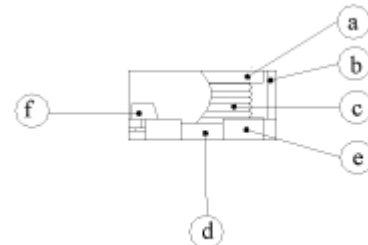
Series	Dimensions [mm]									
	A	B	C	D	E(typ.)	F	G(ref.)	H(ref.)	I(ref.)	J(ref.)
PS6028	6.00±0.3	6.00±0.3	2.8±0.3	2.0±0.3	1.9	2.2 ref.	2.4	6.7	2.3	2.1
PS7032	7.00±0.3	7.00±0.3	3.20±0.2	2.00 typ.	1.50	4.00 typ.	2.40	7.80	1.80	4.20
PS7045	7.00±0.3	7.00±0.3	4.50±0.3	2.00 typ.	1.50	4.00 typ.	2.40	7.80	1.80	4.20

2. Schematic Diagram



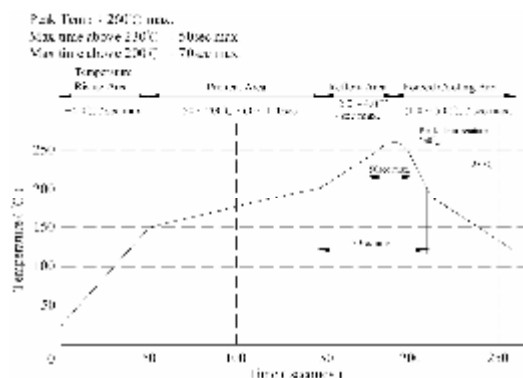
3. Materials

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



4. General Specification

- a.- Temp. rise : 30°C max. (PS7032, PS7045)
- b.- Storage temp. : -40°C ~ +125°C
- c.- Operating temp. :
 - 40°C ~ +125°C (PS6028)
 - (Temp. rise included)
 - 25°C ~ +105°C (PS7032, PS7045)
- d.- Resistance to solder heat : 260°C. 10 secs



5. Electrical Characteristics

PS6028 (1μH - 1000μH)

DWG No.	Inductance (μH)	Test Freq. L (KHz)	RDC (Ω) max.	I _{rms} (A) max.	I _{sat} (A) max.
PS6028 - 1R0M	1.0±20%	1	0.022	3.80	3.00
PS6028 - 1R5M	1.5±20%	1	0.025	3.20	2.50
PS6028 - 2R2M	2.2±20%	1	0.032	3.00	2.20
PS6028 - 3R3M	3.3±20%	1	0.044	1.92	1.55
PS6028 - 4R7M	4.7±20%	1	0.050	1.80	1.35
PS6028 - 6R8M	6.8±20%	1	0.070	1.45	1.20
PS6028 - 100M	10.0±20%	1	0.105	1.20	1.00
PS6028 - 150M	15.0±20%	1	0.140	1.00	0.80
PS6028 - 220M	22.0±20%	1	0.220	0.80	0.65
PS6028 - 330M	33.0±20%	1	0.280	0.65	0.55
PS6028 - 470M	47.0±20%	1	0.380	0.55	0.48
PS6028 - 680M	68.0±20%	1	0.600	0.45	0.38
PS6028 - 101M	100.0±20%	1	0.840	0.38	0.31
PS6028 - 151M	150.0±20%	1	1.200	0.30	0.26
PS6028 - 221M	220.0±20%	1	1.700	0.25	0.22
PS6028 - 331M	330.0±20%	1	2.450	0.20	0.17
PS6028 - 471M	470.0±20%	1	3.600	0.17	0.14
PS6028 - 681M	680.0±20%	1	5.400	0.13	0.11
PS6028 - 102M	1000.0±20%	1	8.200	0.11	0.09

PS7032 (3.3μH - 1000μH)

DWG No.	Inductance (μH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (W) max.	I _{rms} (A) max.	I _{sat} (A) typ.
			L (KHz)	Q (MHz)				
PS7032 - 3R3M	3.3±20%	16	1	7.96	55.0	0.027	2.40	2.20
PS7032 - 4R7M	4.7±20%	16	1	7.96	43.0	0.042	2.00	2.00
PS7032 - 6R8M	6.8±20%	17	1	7.96	37.0	0.054	1.60	1.80
PS7032 - 100M	10.0±20%	25	1	2.52	35.0	0.068	1.40	1.60
PS7032 - 150M	15.0±20%	22	1	2.52	32.0	0.095	1.10	1.20
PS7032 - 220M	22.0±20%	20	1	2.52	29.0	0.135	0.96	1.05
PS7032 - 330M	33.0±20%	23	1	2.52	20.0	0.200	0.76	0.86
PS7032 - 470M	47.0±20%	26	1	2.52	18.0	0.270	0.67	0.70
PS7032 - 680M	68.0±20%	22	1	2.52	16.0	0.380	0.60	0.67
PS7032 - 101M	100.0±20%	28	1	0.796	12.0	0.540	0.45	0.50
PS7032 - 151M	150.0±20%	35	1	0.796	10.0	0.800	0.37	0.38

PS7032 (3.3μH – 1000μH)

PS7032 – 221M	220.0±20%	47	1	0.796	7.5	1.300	0.30	0.32
PS7032 – 331M	330.0±20%	46	1	0.796	6.1	1.900	0.22	0.24
PS7032 – 471M	470.0±20%	34	1	0.796	5.1	2.400	0.20	0.20
PS7032 – 681M	680.0±20%	58	1	0.796	3.8	3.750	0.16	0.15
PS7032 – 102M	1000.0±20%	120	1	0.252	3.1	5.400	0.15	0.14

PS7045 (10μH – 1000μH)

DWG No.	Inductance (mH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (W) max.	I _{rms} (A) max.	I _{sat} (A) typ.
			L (KHz)	Q (MHz)				
PS7045 – 100M	10.0±20%	30	1	2.52	25	0.042	2.00	1.70
PS7045 – 150M	15.0±20%	31	1	2.52	24	0.062	1.60	1.35
PS7045 – 220M	22.0±20%	26	1	2.52	18	0.082	1.35	1.10
PS7045 – 330M	33.0±20%	25	1	2.52	12	0.115	1.15	0.90
PS7045 – 470M	47.0±20%	29	1	2.52	11	0.150	0.95	0.78
PS7045 – 680M	68.0±20%	22	1	2.52	10	0.210	0.77	0.60
PS7045 – 101M	100.0±20%	40	1	0.796	8	0.300	0.65	0.50
PS7045 – 151M	150.0±20%	51	1	0.796	7	0.480	0.53	0.41
PS7045 – 221M	220.0±20%	44	1	0.796	5	0.700	0.45	0.36
PS7045 – 331M	330.0±20%	65	1	0.796	4	0.730	0.40	0.25
PS7045 – 471M	470.0±20%	80	1	0.796	3	1.100	0.32	0.22
PS7045 – 681M	680.0±20%	65	1	0.796	3	1.600	0.27	0.20
PS7045 – 102M	1000.0±20%	90	1	0.252	3	2.400	0.25	0.15

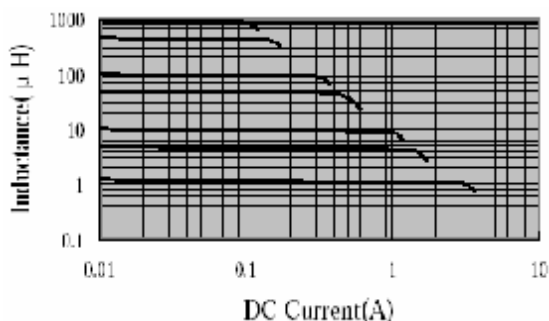
[Indutance tested at 0.5V] [I_{rms} base on temp. rise: 40°C(PS6028), 30°C(PS7032, PS7045)]

[I_{sat} base on ΔL/L0A = 10%(PS7032, PS7045_{100M ~ 221M}), 25%(PS6028, PS7045_{331M ~ 102M})]

6. Curve

Inductance VS. DC Current Curve

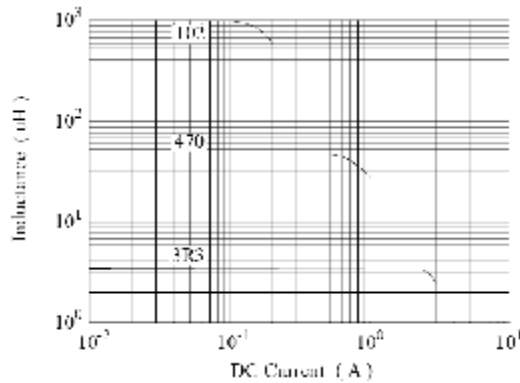
PS6028



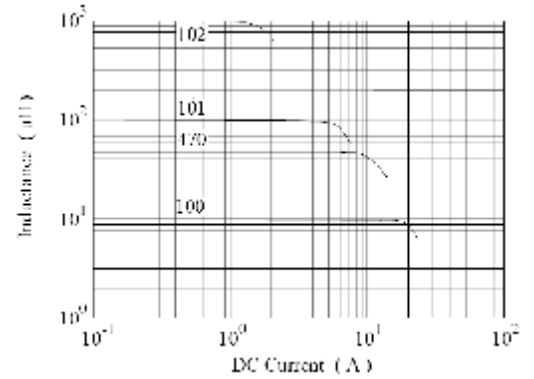
C/Severo Ochoa 33 - Parque Tecnológico de Andalucía. 29590 Campanillas .Málaga (Spain) Phone +34 951 231 320 Fax +34 951 231 321
E-mail: mar.villarrubia@grupopremo.com Web <http://www.grupopremo.com>

Inductance VS. DC Current Curve

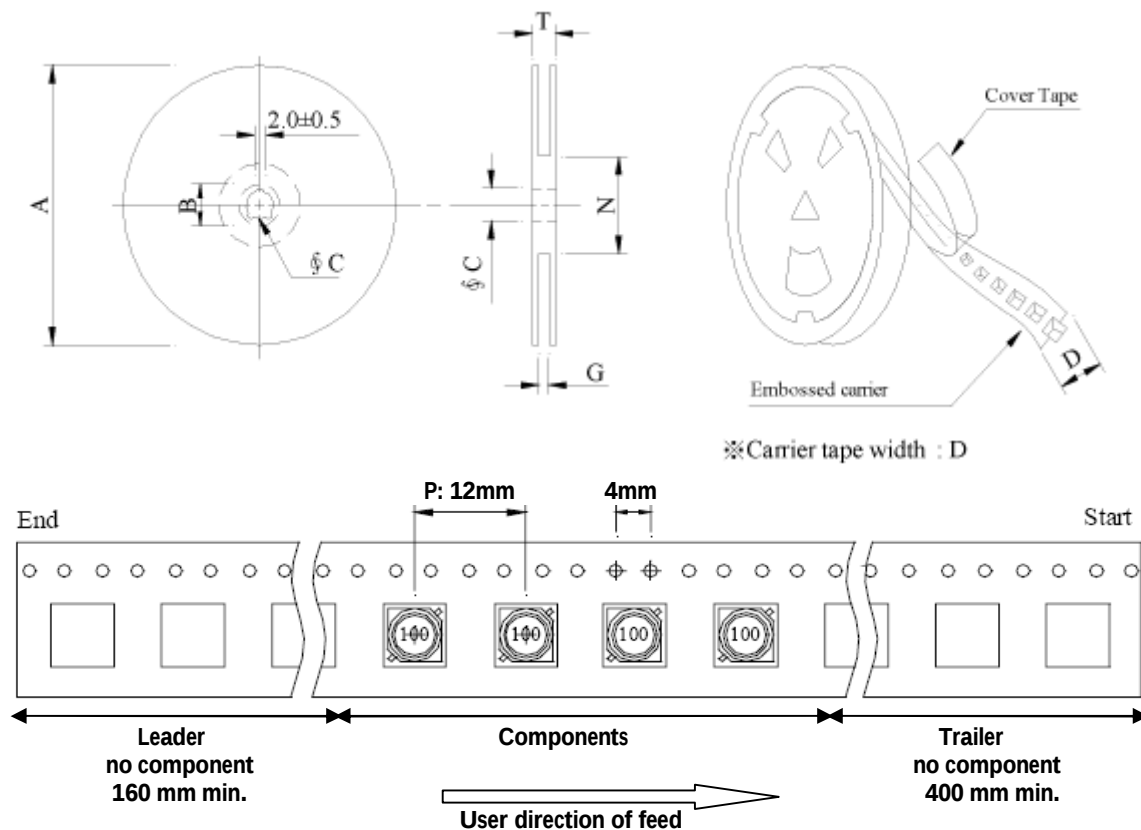
PS7032



PS7045



7. Packaging Information



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 E-mail: mar.villarrubia@grupopremo.com Web <http://www.grupopremo.com>

PS6028

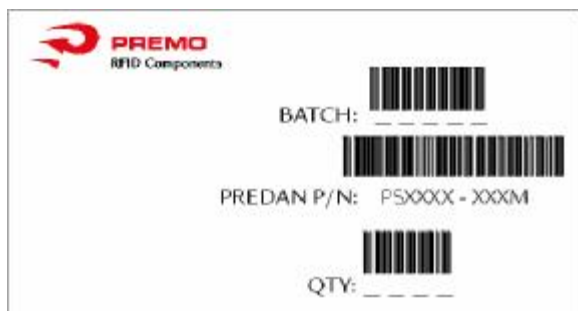
Style	Dimensions [mm]						
	A	B	C	D	G	N	T
07 - 16	178	21±0.8	13	16	18 ⁺⁰	50 ⁻⁰	20.5
13 - 16	330	21±0.8	13±0.5	16	18 ⁺⁰	50 ⁻⁰	22.4

PS7032 & PS7045

Style	Dimensions [mm]						
	A	B	C	D	G	N	T
13 - 16	330	21±0.8	13±0.5	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)
PS6028	400	650	07 - 16	16,000	7.2	42 x 41 x 24
PS6028	1,500	1,050	13 - 16	9,000	4.7	40 x 40 x 24
PS7032	1,500	200	13 - 16	9,000	1.44	40 x 40 x 24
PS7045	1,000	255	13 - 16	6,000	1.84	40 x 40 x 24

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 : $150\pm 25^\circ\text{C}$ for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : $235\pm 5^\circ\text{C}$ (PS6028) $260\pm 5^\circ\text{C}$ (PS7032, PS7045) Flux : Rosin Dip time : 4 ± 1 seconds
Thermal shock test (Temp. cycle)	Inductance shall not change more than $\pm 30\%$	$\frac{\text{Room temp.}}{15 \text{ minutes}} \longrightarrow \frac{-25\pm 2^\circ\text{C}}{30 \text{ minutes}}$ $\frac{\text{Room temp.}}{15 \text{ minutes}} \longrightarrow \frac{85\pm 2^\circ\text{C}}{30 \text{ minutes}}$ Total : 50 cycles
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 : $85\pm 2^\circ\text{C}$ (PS6028) $105\pm 2^\circ\text{C}$ (PS7032, PS7045) Applied current : Per specifications Time : 500 hours

10. Edition Control

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

PS6028 , PS7032 & PS7045 SMD Power Inductors Shielded



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