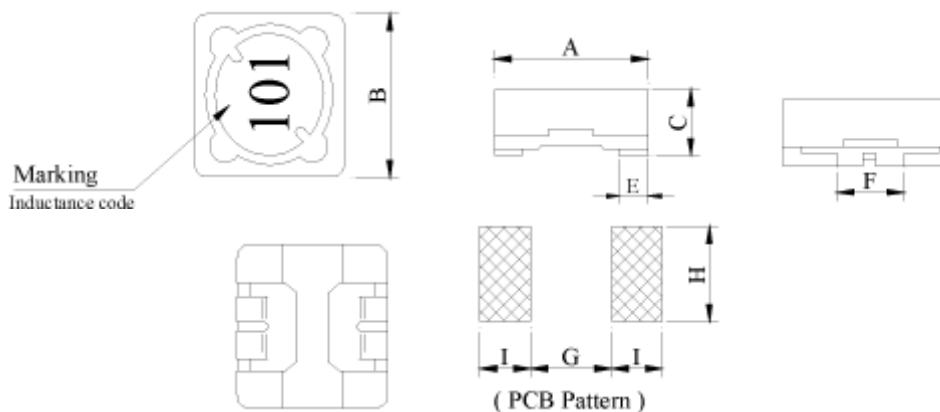


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1. Configuration & Dimensions



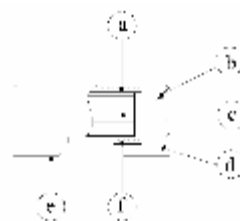
Series	Dimensions [mm]							
	A	B	C	E	F	G(ref.)	H(ref.)	I(ref.)
SHA	12.7±0.3	12.7±0.3	5.0±0.5	2.3±0.2	5.0±0.2	6.0	7.0	4.0
SHB	12.7±0.3	12.7±0.3	6.0±0.5	2.3±0.2	5.0±0.2	6.0	7.0	4.0
SHC	12.7±0.3	12.7±0.3	8.0±0.5	2.3±0.2	5.0±0.2	6.0	7.0	4.0
PS1260	12.5±0.3	12.5±0.3	6.0±0.5	-	5.0±0.3	6.8	5.4	2.9

2. Schematic Diagram



3. Materials

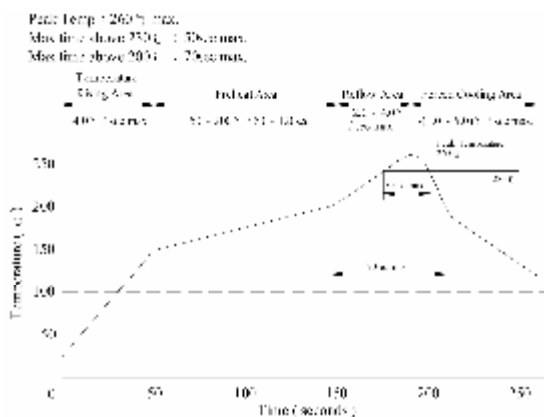
- a.- Core : Ferrite DR core
- b.- Core : Ferrite RI core
- c.- Wire : Enamelled copper wire (class F)
- d.- Base : LCP
- e.- Terminal : Cu / Ni / Sn
- f.- Adhesive : Epoxy resin
- g.- Remark : Lead content 200ppm max. include ferrite



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4. General Specification

- a.- Temp. rise $\left\{ \begin{array}{l} 40^{\circ}\text{C max. (SHA,SHB,SHC)} \\ 40^{\circ}\text{C typ. (PS1260)} \end{array} \right.$
- b.- Rated current : Base on temp. rise & $\Delta L/L0A = 10\%$ max.
- c.- Storage temp. : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- d.- Operating temp. $\left\{ \begin{array}{l} -40^{\circ}\text{C} \sim +105^{\circ}\text{C (SHA,SHB,SHC)} \\ -40^{\circ}\text{C} \sim +125^{\circ}\text{C (PS1260)} \end{array} \right.$
- e.- Resistance to solder heat : 260°C . 10 secs



5. Electrical Characteristics

SHA (2.5 μH – 820 μH)

DWG No.	Inductance (mH)	Test Freq. L (KHz)	RDC (m Ω) max.	IDC (A) max.
SHA – 2R5M	2.50 \pm 20%	1	24.0	5.00
SHA – 5R0M	5.00 \pm 20%	1	35.0	4.00
SHA – 7R5M	7.50 \pm 20%	1	40.0	3.50
SHA – 100M	10.0 \pm 20%	1	54.0	3.00
SHA – 120M	12.0 \pm 20%	1	65.0	2.80
SHA – 150M	15.0 \pm 20%	1	70.0	2.70
SHA – 180M	18.0 \pm 20%	1	82.0	2.60
SHA – 220M	22.0 \pm 20%	1	95.0	2.40
SHA – 250M	25.0 \pm 20%	1	120.0	2.00
SHA – 330M	33.0 \pm 20%	1	145.0	1.80
SHA – 390M	39.0 \pm 20%	1	160.0	1.65
SHA – 500L	50.0 \pm 15%	1	200.0	1.50
SHA – 560L	56.0 \pm 15%	1	240.0	1.40
SHA – 680L	68.0 \pm 15%	1	280.0	1.30
SHA – 750L	75.0 \pm 15%	1	330.0	1.20
SHA – 101K	100.0 \pm 10%	1	400.0	1.00
SHA – 121K	120.0 \pm 10%	1	500.0	0.90
SHA – 151K	150.0 \pm 10%	1	580.0	0.80
SHA – 181K	180.0 \pm 10%	1	750.0	0.70
SHA – 221K	220.0 \pm 10%	1	840.0	0.65
SHA – 271K	270.0 \pm 10%	1	1000.0	0.60

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SHA (2.5µH – 820µH)

SHA - 331K	330.0±10%	1	1340.0	0.54
SHA - 391K	390.0±10%	1	1500.0	0.50
SHA - 471K	470.0±10%	1	1980.0	0.45
SHA - 561K	560.0±10%	1	2200.0	0.40
SHA - 681K	680.0±10%	1	2400.0	0.35
SHA - 821K	820.0±10%	1	3000.0	0.30

SHB (2.5µH – 1500µH)

DWG No.	Inductance (mH)	Test Freq. L (KHz)	RDC (mΩ) max.	IDC (A) max.
SHB - 2R5M	2.50±20%	1	16.0	6.20
SHB - 5R0M	5.00±20%	1	22.0	4.70
SHB - 7R5M	7.50±20%	1	25.0	3.80
SHB - 100M	10.0±20%	1	35.0	3.30
SHB - 120M	12.0±20%	1	38.0	3.00
SHB - 150M	15.0±20%	1	42.0	2.80
SHB - 180M	18.0±20%	1	50.0	2.50
SHB - 220M	22.0±20%	1	62.0	2.30
SHB - 270M	27.0±20%	1	68.0	2.00
SHB - 330L	33.0±15%	1	90.0	1.90
SHB - 390L	39.0±15%	1	100.0	1.75
SHB - 470L	47.0±15%	1	130.0	1.60
SHB - 560L	56.0±15%	1	155.0	1.45
SHB - 680L	68.0±15%	1	170.0	1.30
SHB - 820L	82.0±15%	1	185.0	1.20
SHB - 101L	100.0±15%	1	220.0	1.10
SHB - 121L	120.0±15%	1	260.0	1.00
SHB - 151K	150.0±10%	1	320.0	0.90
SHB - 181K	180.0±10%	1	380.0	0.80
SHB - 221K	220.0±10%	1	460.0	0.70
SHB - 271K	270.0±10%	1	520.0	0.65
SHB - 331K	330.0±10%	1	660.0	0.60
SHB - 391K	390.0±10%	1	870.0	0.55
SHB - 471K	470.0±10%	1	970.0	0.50
SHB - 561K	560.0±10%	1	1320.0	0.45
SHB - 681K	680.0±10%	1	1500.0	0.40
SHB - 821K	820.0±10%	1	1700.0	0.35
SHB - 102K	1000.0±10%	1	2300.0	0.30
SHB - 122K	1200.0±10%	1	2650.0	0.25
SHB - 152K	1500.0±10%	1	3500.0	0.20

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SHC (2.5µH – 1500µH)

DWG No.	Inductance (mH)	Test Freq. L (KHz)	RDC (mΩ) max.	IDC (A) max.
SHC - 2R5M	2.50±20%	1	11.4	7.80
SHC - 4R5M	4.50±20%	1	14.0	6.80
SHC - 6R5M	6.50±20%	1	18.0	6.50
SHC - 100M	10.0±20%	1	21.0	5.40
SHC - 120M	12.0±20%	1	25.0	4.90
SHC - 150M	15.0±20%	1	36.0	4.50
SHC - 180M	18.0±20%	1	40.0	3.90
SHC - 220M	22.0±20%	1	43.0	3.60
SHC - 270M	27.0±20%	1	48.0	3.40
SHC - 330L	33.0±15%	1	62.0	3.00
SHC - 390L	39.0±15%	1	76.0	2.70
SHC - 470L	47.0±15%	1	85.0	2.50
SHC - 560L	56.0±15%	1	110.0	2.30
SHC - 680L	68.0±15%	1	135.0	2.10
SHC - 820L	82.0±15%	1	150.0	1.90
SHC - 101L	100.0±15%	1	170.0	1.70
SHC - 121L	120.0±15%	1	190.0	1.50
SHC - 151L	150.0±15%	1	240.0	1.40
SHC - 181L	180.0±15%	1	270.0	1.30
SHC - 221K	220.0±10%	1	380.0	1.10
SHC - 271K	270.0±10%	1	400.0	1.00
SHC - 331K	330.0±10%	1	650.0	0.90
SHC - 391K	390.0±10%	1	670.0	0.85
SHC - 471K	470.0±10%	1	850.0	0.80
SHC - 561K	560.0±10%	1	900.0	0.70
SHC - 681K	680.0±10%	1	1000.0	0.65
SHC - 821K	820.0±10%	1	1150.0	0.60
SHC - 102K	1000.0±10%	1	1650.0	0.55
SHC - 122K	1200.0±10%	1	2000.0	0.40
SHC - 152K	1500.0±10%	1	2350.0	0.36

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PS1260 (1.2µH - 100µH)

DWG No.	Inductance (mH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (mW) max.	I _{rms} (A) ΔT=40°C typ.	I _{sat} (A) ΔL/LOA=25% typ.	
			L (KHz)						Q (MHz)
			1R2N ~ 7R6N (0.1V)	100M ~ 101M (1V)					
PS1260 - 1R2N	1.20±30%	18	100	1	7.96	91.10	8.0	9.20	9.80
PS1260 - 2R4N	2.40±30%	18	100	1	7.96	63.80	11.5	7.80	8.00
PS1260 - 3R5N	3.50±30%	22	100	1	7.96	37.60	13.0	7.50	7.60
PS1260 - 4R7N	4.70±30%	19	100	1	7.96	36.70	15.5	6.80	7.00
PS1260 - 6R1N	6.10±30%	21	100	1	7.96	29.80	17.0	6.60	6.80
PS1260 - 7R6N	7.60±30%	16	100	1	7.96	27.90	19.0	6.00	6.20
PS1260 - 100M	10.0±20%	32	100	1	2.52	21.00	20.0	5.50	5.50
PS1260 - 120M	12.0±20%	27	100	1	2.52	19.40	23.0	5.20	5.00
PS1260 - 150M	15.0±20%	25	100	1	2.52	17.60	27.0	5.00	4.60
PS1260 - 180M	18.0±20%	28	100	1	2.52	15.50	36.0	4.20	3.90
PS1260 - 220M	22.0±20%	29	100	1	2.52	13.40	43.0	4.00	3.70
PS1260 - 270M	27.0±20%	26	100	1	2.52	12.70	45.0	3.60	3.30
PS1260 - 330M	33.0±20%	27	100	1	2.52	9.97	60.0	3.00	2.80
PS1260 - 390M	39.0±20%	22	100	1	2.52	10.40	70.0	2.80	2.70
PS1260 - 470M	47.0±20%	22	100	1	2.52	7.63	86.0	2.60	2.50
PS1260 - 560M	56.0±20%	24	100	1	2.52	7.92	100.0	2.30	2.20
PS1260 - 680M	68.0±20%	22	100	1	2.52	7.43	110.0	2.10	2.10
PS1260 - 820M	82.0±20%	25	100	1	2.52	6.85	145.0	1.95	1.90
PS1260 - 101M	100.0±20%	26	100	1	0.796	6.07	180.0	1.70	1.70

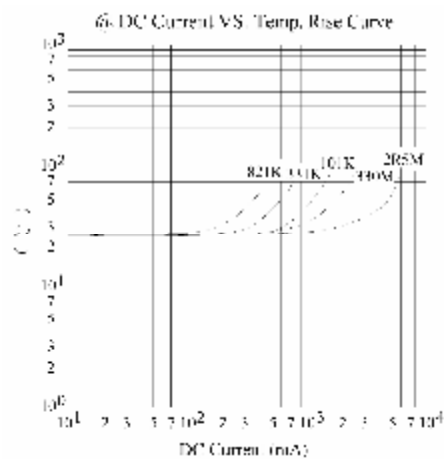
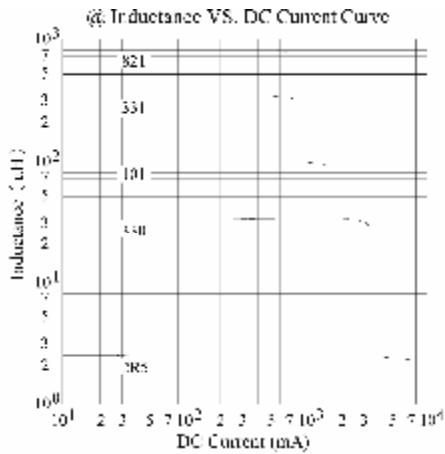
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6. Curve

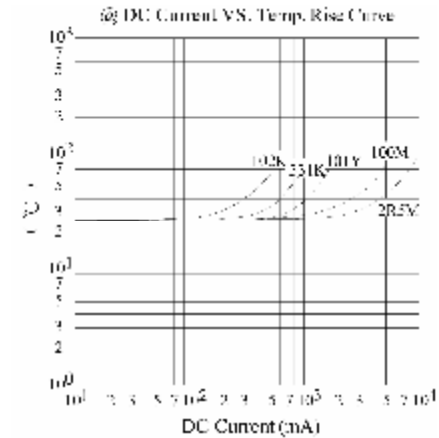
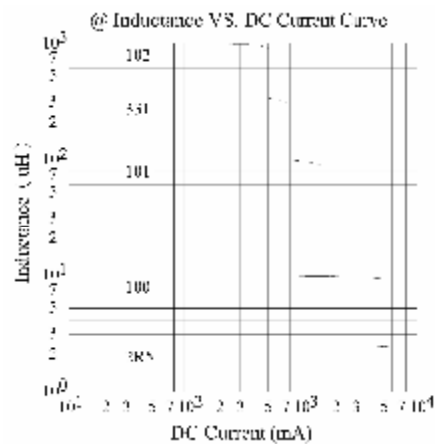
Inductance VS. DC Current Curve

DC Current VS. Temp. Rise Curve

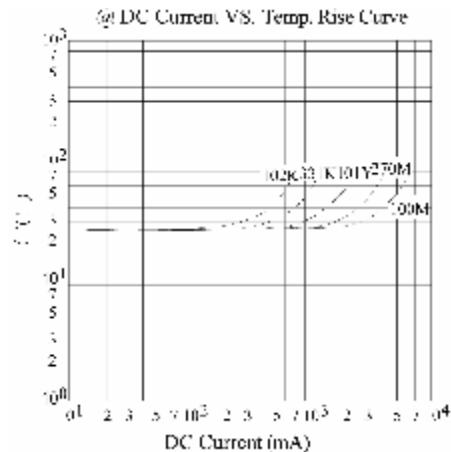
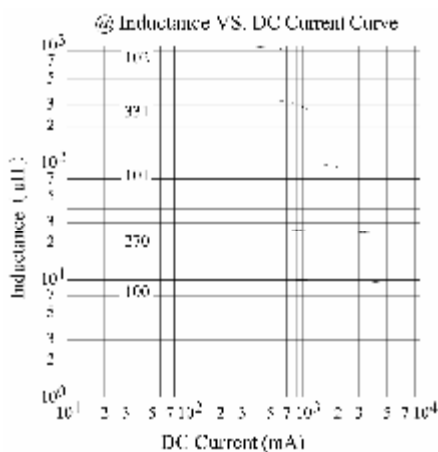
SHA



SHB



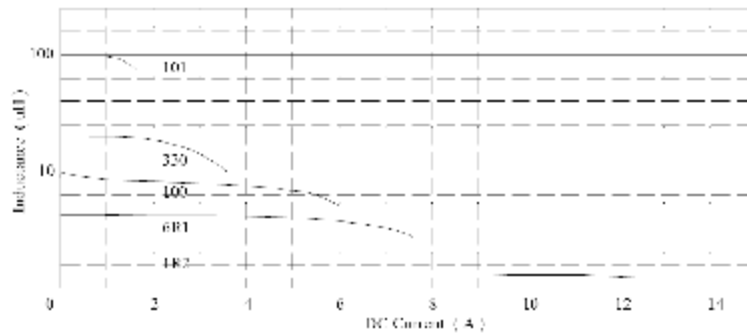
SHC



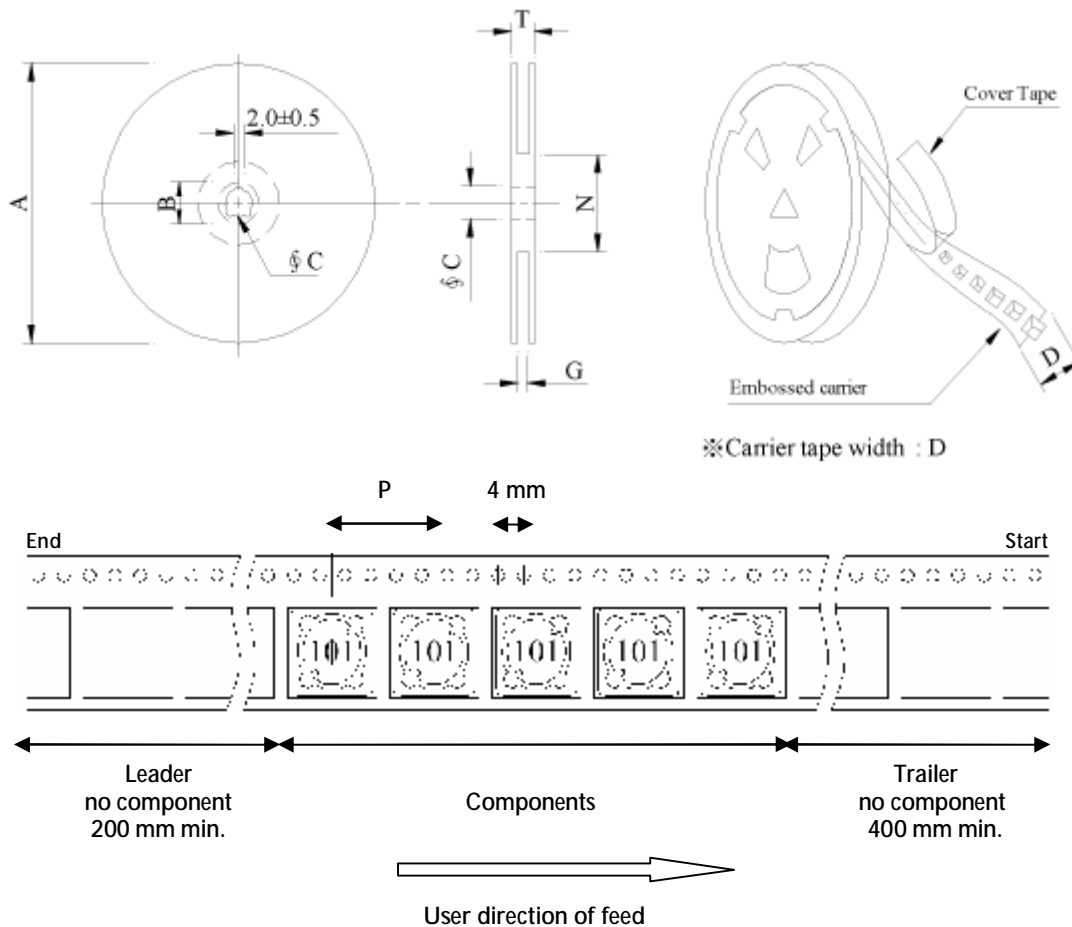
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Inductance VS. DC Current Curve

PS1260



7. Packaging Information



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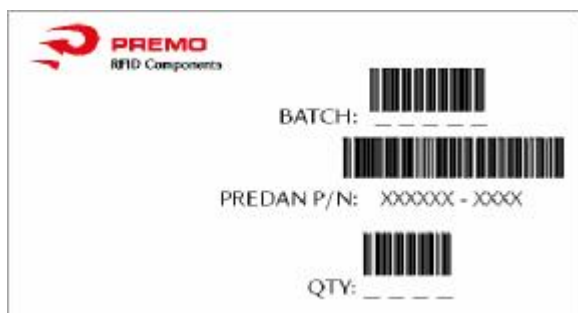
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(SHA, SHB, PS1260 à P = 16mm) (SHC à P = 20mm)

Style	Dimensions [mm]						
	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13	24	26 ⁺⁰	50 ⁰	30.4

Series	Inner : Reel			Outer : Carton		
	Q'TY(pcs)	G.W.(gw)	Style	Q'TY(pcs)	G.W.(Kg)	Size(cm)
SHA	600	1,900	13 - 24	2,400	9.8	40 x 40 x 24
SHB	600	2,200	13 - 24	2,400	11.0	40 x 40 x 24
SHC	400	2,100	13 - 24	1,600	10.6	40 x 40 x 24
PS1260	600	2,200	13 - 24	2,400	11.0	40 x 40 x 24

8. Labelling



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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%	<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 specifications Time : 500 hours							
High temp. Resistance test	Temperature : 105±2°C 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