

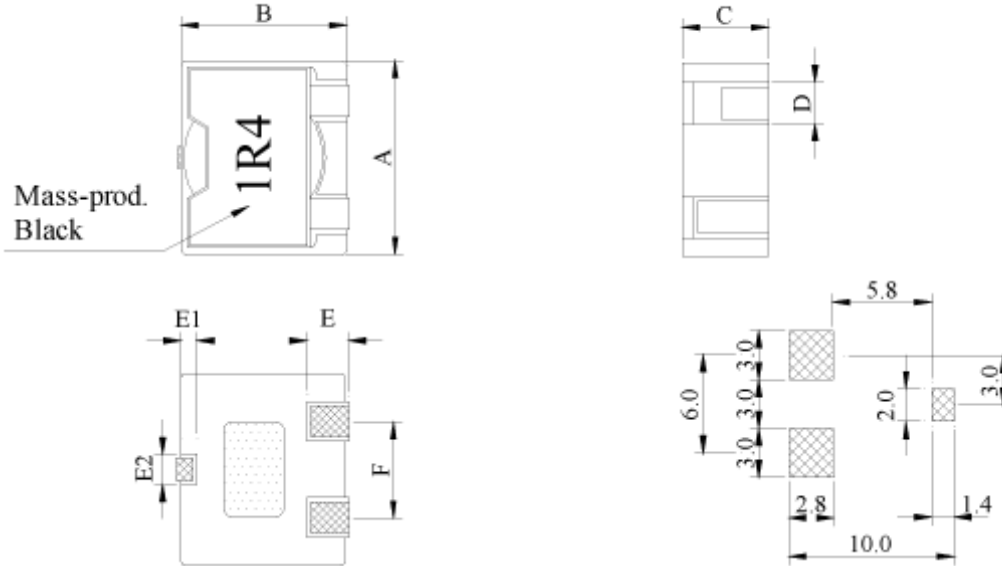
PSP1045 & PSP1055

SMD Power Inductors Shielded



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1. Configuration & Dimensions



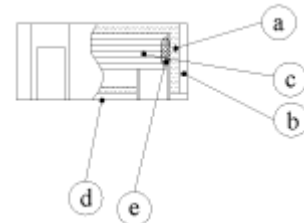
Series	Dimensions [mm]							
	A	B	C	D(typ.)	E(typ.)	E1(typ.)	E2(typ.)	F(typ.)
PSP1045	11.00±0.30	9.35±0.30	4.50±0.30	2.10	2.00	1.00	1.50	6.00
PSP1055	11.00±0.30	9.35±0.30	5.50±0.30	2.10	2.00	1.00	1.50	6.00

2. Schematic Diagram



3. Materials

- a.- Core : Ferrite ER Core
- b.- Base : UL 94V - 0
- c.- Wire : Ultra - fine rectangular enamelled copper wire
- d.- Clip : Cu / Ni / Sn
- e.- Adhesive : Epoxy resin
- f.- Remark : Lead content 200ppm max. include ferrite



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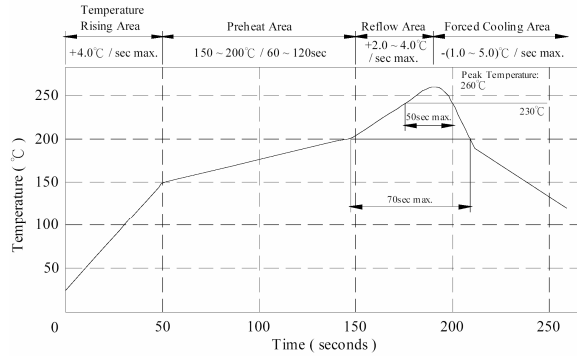


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4. General Specification

- a.- Storage temp. : -55°C ~ +135°C
- b.- Operating temp. : -55°C ~ +135°C
(Temp. rise included)
- c.- Resistance to solder heat : 260°C. 10 secs

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



5. Electrical Characteristics

PSP1045 (0.36µH – 3.20µH)

DWG No.	Inductance (µH)	Test Freq. L (KHz)	RDC (mΩ)		I _{rms} (A) max.	I _{sat} (A) typ.
			typ.	max.		
PSP1045 – R36N	0.36±30%	100	1.3	1.7	23.0	26.0
PSP1045 – R80M	0.80±20%	100	3.0	3.9	15.0	17.0
PSP1045 – 1R4M	1.40±20%	100	3.4	4.4	13.0	14.0
PSP1045 – 2R2M	2.20±20%	100	6.7	8.7	9.5	10.0
PSP1045 – 3R2M	3.20±20%	100	8.0	10.4	8.0	8.0

PSP1055 (0.36µH – 8.80µH)

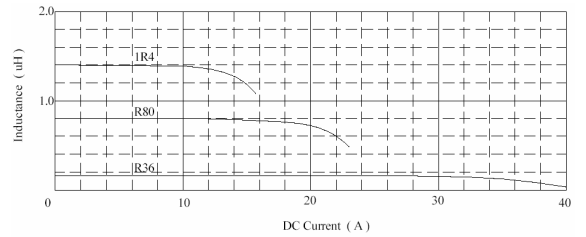
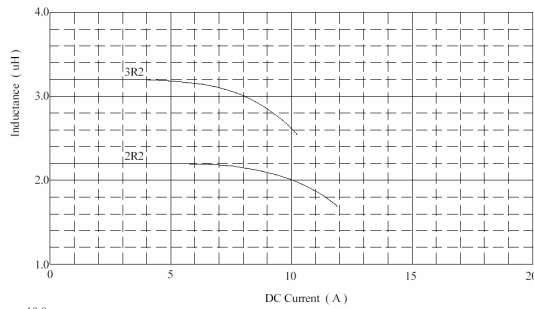
DWG No.	Inductance (µH)	Test Freq. L (KHz)	RDC (mΩ)		I _{rms} (A) max.	I _{sat} (A) typ.
			typ.	max.		
PSP1055 – R36N	0.36±30%	100	1.3	1.7	28.0	26.0
PSP1055 – R80M	0.80±20%	100	1.9	2.5	20.0	18.0
PSP1055 – 1R4M	1.40±20%	100	2.4	3.2	16.0	14.0
PSP1055 – 2R2M	2.20±20%	100	4.7	5.8	12.0	10.0
PSP1055 – 3R2M	3.20±20%	100	5.6	7.2	11.0	9.0
PSP1055 – 4R3M	4.30±20%	100	6.5	8.5	10.0	8.0
PSP1055 – 5R7M	5.70±20%	100	10.7	13.2	7.6	7.0
PSP1055 – 7R2M	7.20±20%	100	11.9	15.5	7.0	6.2
PSP1055 – 8R8M	8.80±20%	100	13.2	17.2	6.0	5.6

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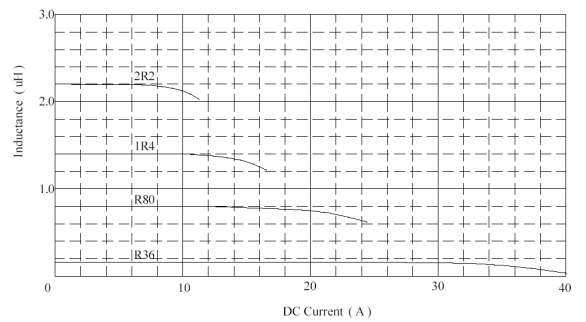
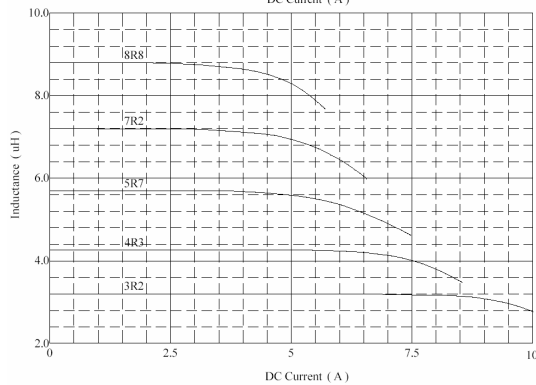
6. Curve

Inductance VS. DC Current Curve

PSP1045

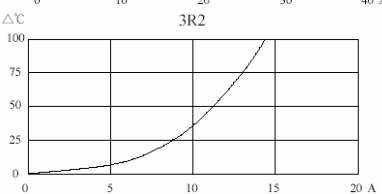
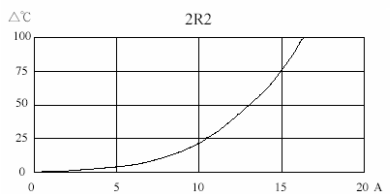
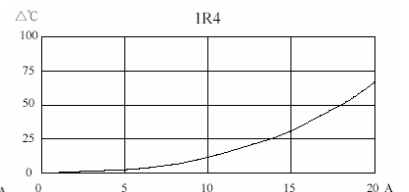
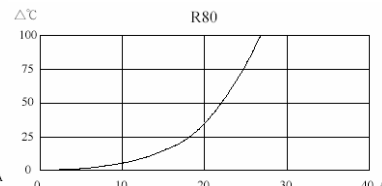
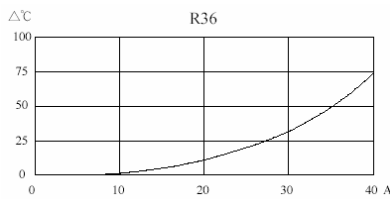


PSP1055



DC Current VS. Temperature Rise

PSP1045

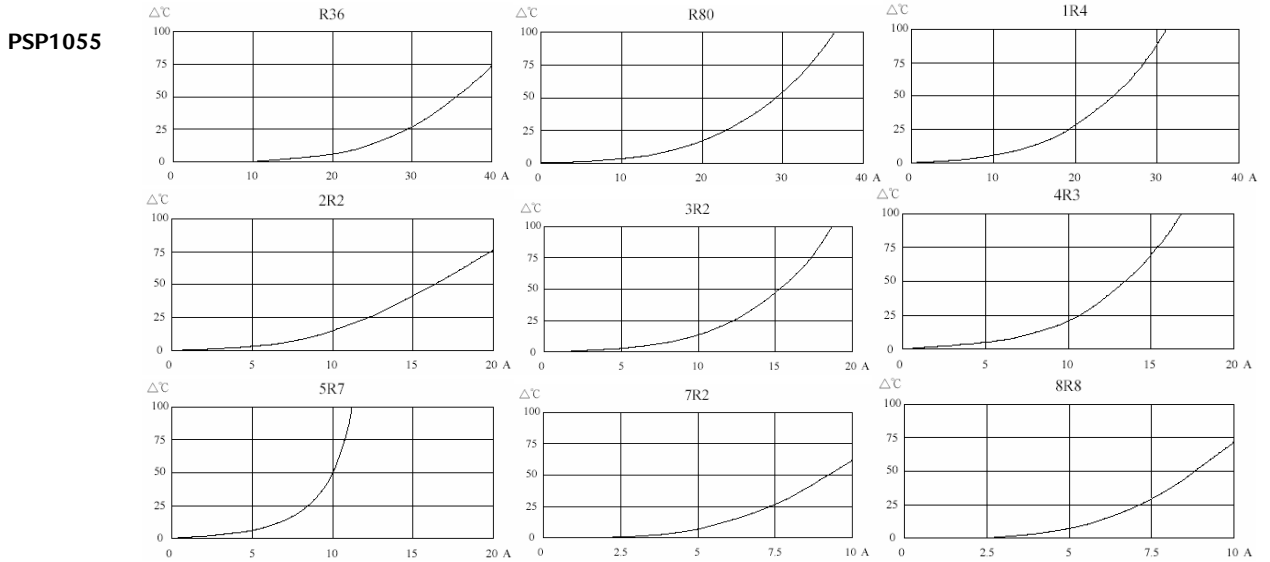


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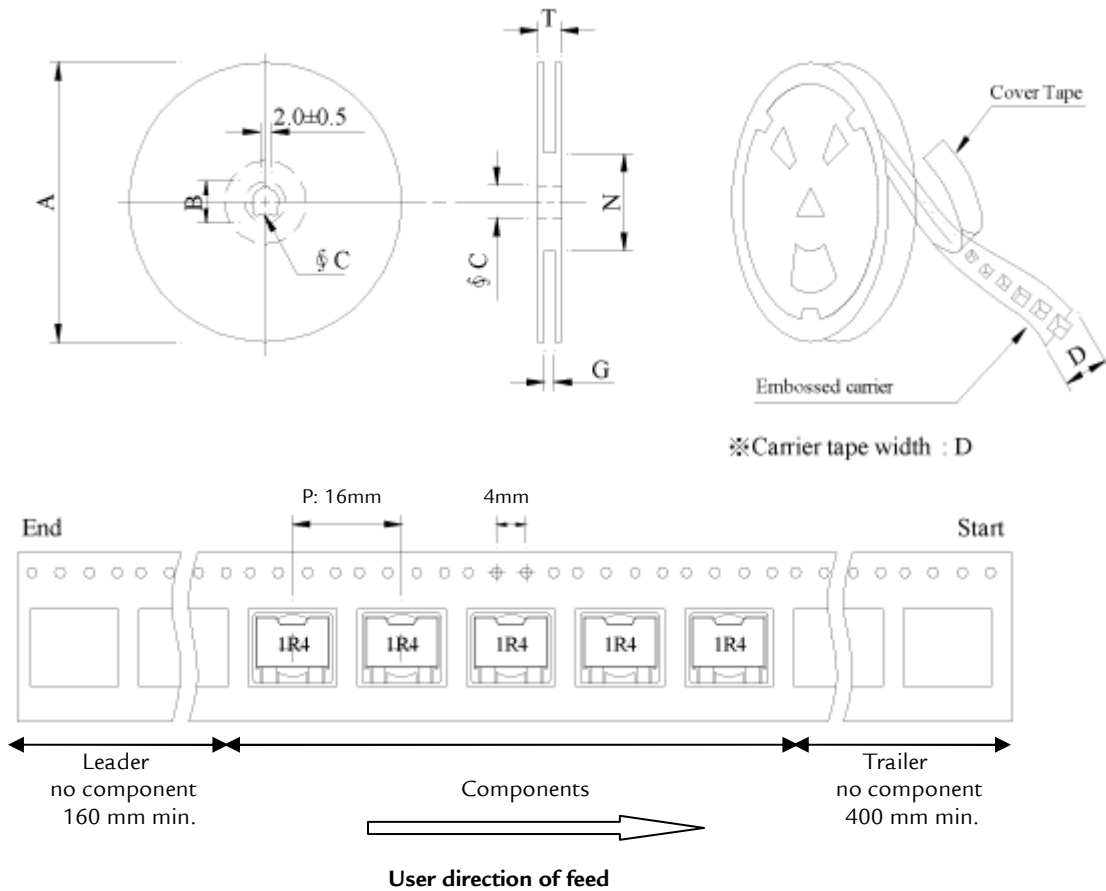
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7. Packaging Information



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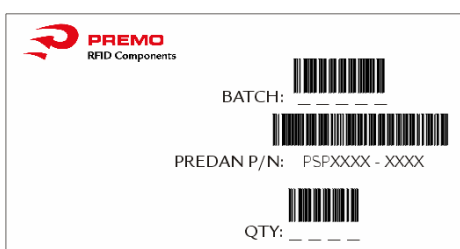


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Style	Dimensions [mm]						
	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	50 ⁰	30.4

Series	Inner : Reel			Outer : Carton		
	Q'TY(pcs)	G.W.(gw)	Style	Q'TY(pcs)	G.W.(Kg)	Size(cm)
PSP1045	600	700	13 - 24	2,400	6.50	40 x 40 x 24
PSP1055	600	700	13 - 24	2,400	6.50	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±25% for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 250±5°C Flux : Rosin Dip time : 4±1 seconds												
Thermal shock test (Temp. cycle)	Inductance shall not change more than ±20%	<table border="0"> <tr> <td>Room temp.</td> <td>→</td> <td>-25±2°C</td> </tr> <tr> <td>15 minutes</td> <td></td> <td>30 minutes</td> </tr> <tr> <td>Room temp.</td> <td>→</td> <td>85±2°C</td> </tr> <tr> <td>15 minutes</td> <td></td> <td>30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp.	→	-25±2°C	15 minutes		30 minutes	Room temp.	→	85±2°C	15 minutes		30 minutes
Room temp.		→	-25±2°C											
15 minutes			30 minutes											
Room temp.	→	85±2°C												
15 minutes		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													

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10. Edition Control

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