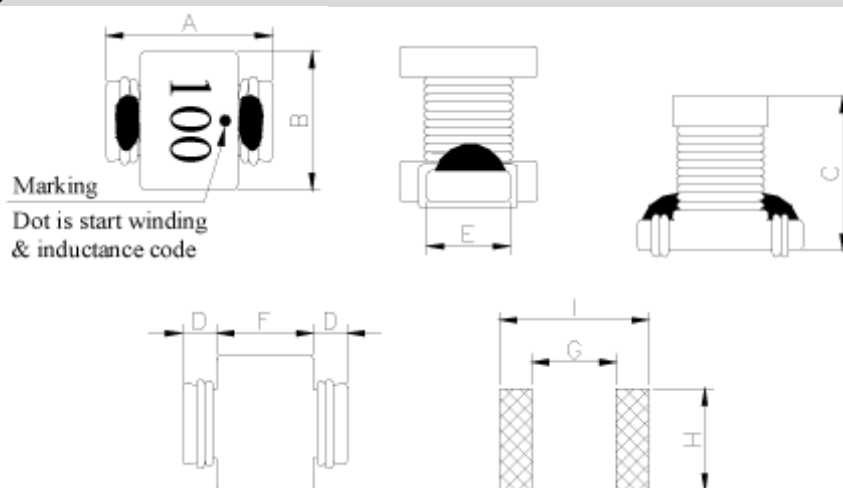


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1. Configuration & Dimensions



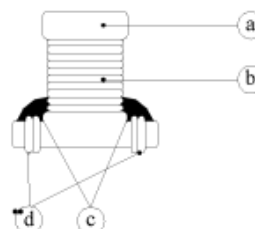
Series	Dimensions [mm]								
	A	B	C	D(typ.)	E(typ.)	F(typ.)	G(ref.)	H(ref.)	I(ref.)
CDH50	4.80±0.3	4.00±0.3	4.50±0.3	1.00	2.40	2.80	2.00	2.80	4.80

2. Schematic Diagram



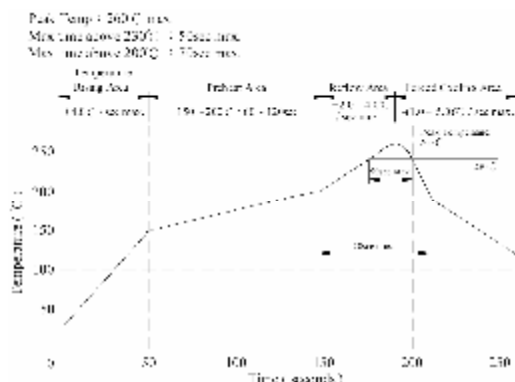
3. Materials

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



4. General Specification

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



CDH50 SMD Power Inductors Unshielded



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5. Electrical Characteristics

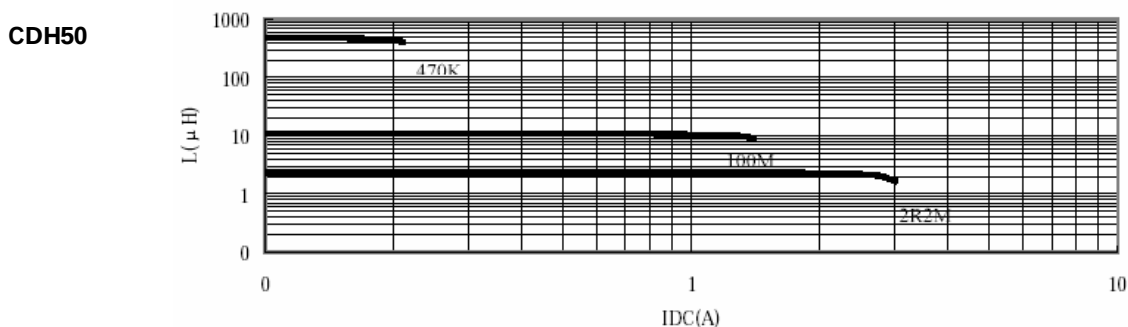
CDH50 (2.2 μ H – 470 μ H)

DWG No.	Inductance (mH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (Ω)		I _{rms} (mA) $\Delta T=40^{\circ}\text{C}$ typ.	I _{sat} (mA) $\Delta L/L_{0A}=10\%$ typ.
			L (KHz)	Q (MHz)		typ.	max.		
CDH50 - 2R2M	2.2 $\pm 20\%$	35	100	7.96	70.0	0.032	0.043	2600	2400
CDH50 - 3R3M	3.3 $\pm 20\%$	32	100	7.96	40.0	0.043	0.058	2300	2000
CDH50 - 4R7M	4.7 $\pm 20\%$	25	100	7.96	30.0	0.050	0.068	2100	1800
CDH50 - 100M	10.0 $\pm 20\%$	32	100	2.52	26.0	0.110	0.145	1500	1150
CDH50 - 220M	22.0 $\pm 20\%$	30	100	2.52	13.0	0.250	0.315	950	800
CDH50 - 330M	33.0 $\pm 20\%$	28	100	2.52	10.0	0.400	0.500	700	650
CDH50 - 470M	47.0 $\pm 20\%$	26	100	2.52	7.0	0.525	0.660	580	550
CDH50 - 101K	100.0 $\pm 10\%$	40	100	0.796	6.5	1.000	1.250	430	370
CDH50 - 221K	220.0 $\pm 10\%$	40	100	0.796	4.0	2.200	2.750	290	270
CDH50 - 331K	330.0 $\pm 10\%$	40	100	0.796	3.5	3.250	4.050	230	210
CDH50 - 471K	470.0 $\pm 10\%$	40	100	0.796	3.2	5.200	6.500	200	170

[Inductance tested at 0.1V]

6. Curve

Inductance VS. IDC

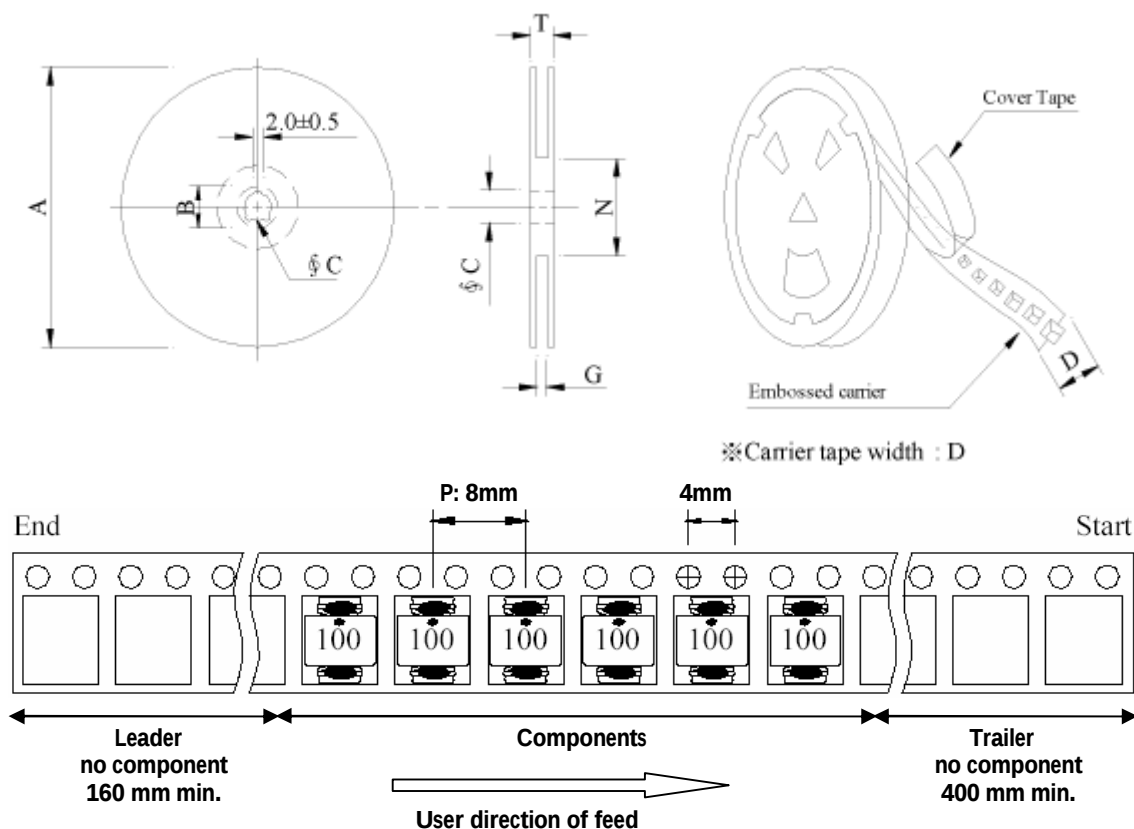


CDH50 SMD Power Inductors Unshielded



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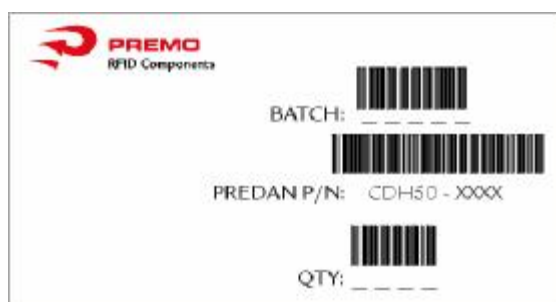
7. Packaging Information



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)
CDH50	1,200	1,300	13 - 16	7,200	13.0	40 x 40 x 24

8. Labelling



CDH50

SMD Power Inductors Unshielded



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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 : $150\pm 25^\circ\text{C}$ for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : $235\pm 5^\circ\text{C}$ Flux : Rosin Dip time : 4 ± 1 seconds
Thermal shock test (Temp. cycle)	Inductance shall not change more than $\pm 10\%$	Room temp. $\xrightarrow{\quad}$ $-25\pm 2^\circ\text{C}$ 15 minutes $\xrightarrow{\quad}$ 30 minutes Room temp. $\xrightarrow{\quad}$ $85\pm 2^\circ\text{C}$ 15 minutes $\xrightarrow{\quad}$ 30 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 : $105\pm 2^\circ\text{C}$ 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