PREMO
RFID Components

CDH50
SMD Power Inductors Unshielded

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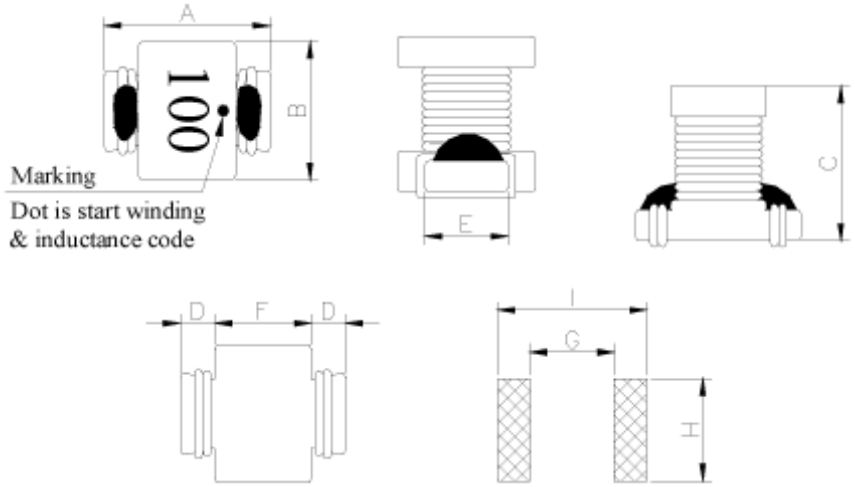
1. Configuration & Dimensions

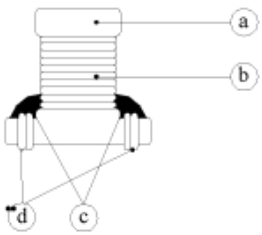


Series	Dimensions [mm]								
	A	B	C	D(typ.)	E(typ.)	F(typ.)	G(ref.)	H(ref.)	I(ref.)
CDH50	4.80±0.3	4.00±0.3	4.50±0.3	1.00	2.40	2.80	2.00	2.80	4.80

2. Schematic Diagram

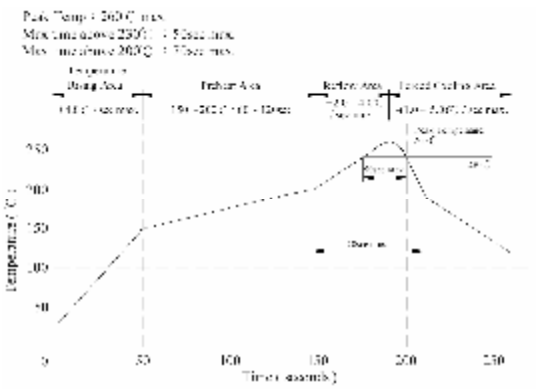
3. Materials

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
ΔL/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



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5. Electrical Characteristics

CDH50 (2.2µH – 470µH)

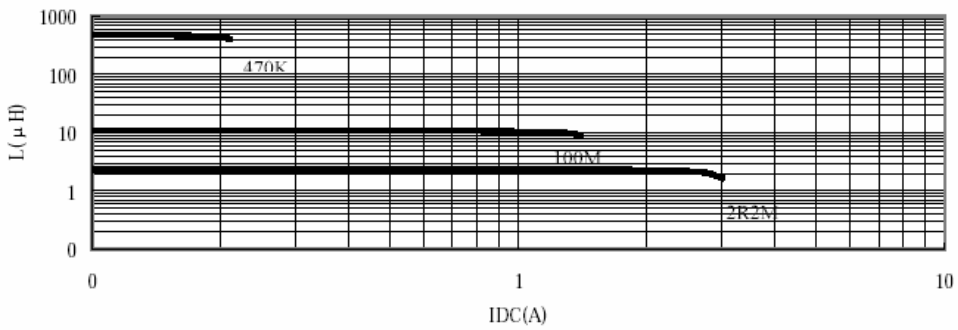
DWG No.	Inductance (mH)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (Ω)		Irms (mA) ΔT=40ºC typ.	Isat (mA) ΔL/L0A=10% typ.
			L (KHz)	Q (MHz)		typ.	max.		
CDH50 – 2R2M	2.2±20%	35	100	7.96	70.0	0.032	0.043	2600	2400
CDH50 – 3R3M	3.3±20%	32	100	7.96	40.0	0.043	0.058	2300	2000
CDH50 – 4R7M	4.7±20%	25	100	7.96	30.0	0.050	0.068	2100	1800
CDH50 – 100M	10.0±20%	32	100	2.52	26.0	0.110	0.145	1500	1150
CDH50 – 220M	22.0±20%	30	100	2.52	13.0	0.250	0.315	950	800
CDH50 – 330M	33.0±20%	28	100	2.52	10.0	0.400	0.500	700	650
CDH50 – 470M	47.0±20%	26	100	2.52	7.0	0.525	0.660	580	550
CDH50 – 101K	100.0±10%	40	100	0.796	6.5	1.000	1.250	430	370
CDH50 – 221K	220.0±10%	40	100	0.796	4.0	2.200	2.750	290	270
CDH50 – 331K	330.0±10%	40	100	0.796	3.5	3.250	4.050	230	210
CDH50 – 471K	470.0±10%	40	100	0.796	3.2	5.200	6.500	200	170

[Inductance tested at 0.1V]

6. Curve

Inductance VS. IDC

CDH50



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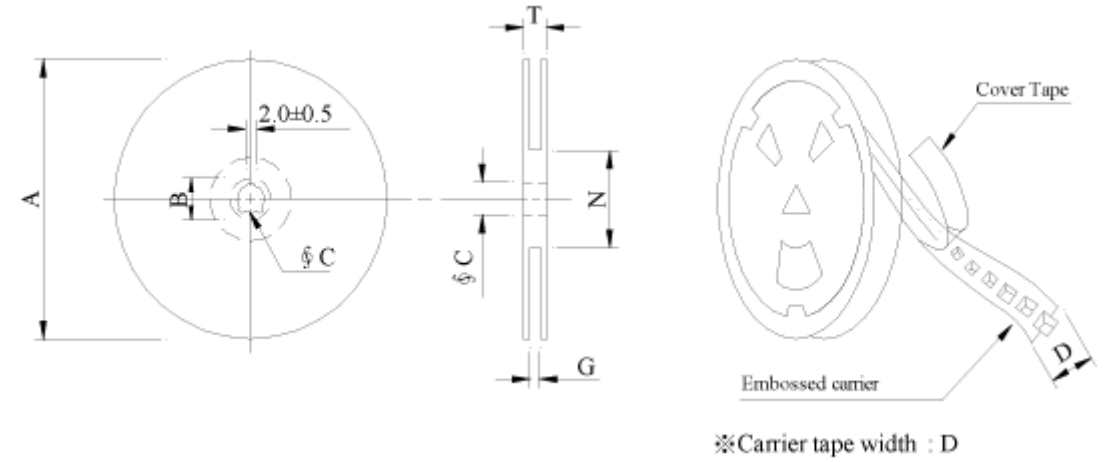
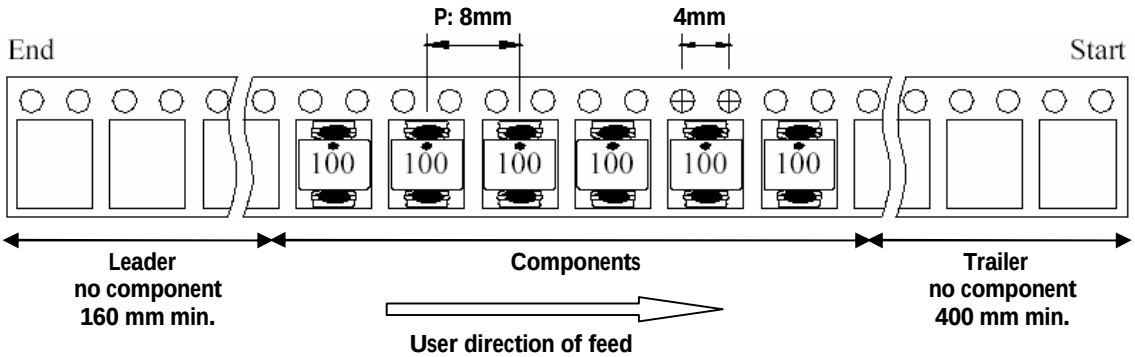
7. Packaging Information

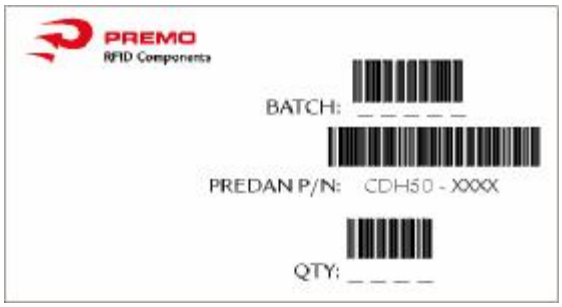




Style	Dimensions [mm]						
	A	B	C	D	G	N	T
13 – 16	330	21±0.8	13±0.5	16	18^{+0}	50^{-0}	22.4

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



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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 ±10%	Room temp. 15 minutes → -25±2°C 30 minutes Room temp. 15 minutes → 85±2°C 30 minutes Total : 50 cycles
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
1st	31/08/06	Update Specification	Pablo Pozo