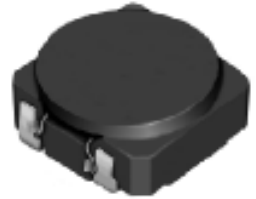
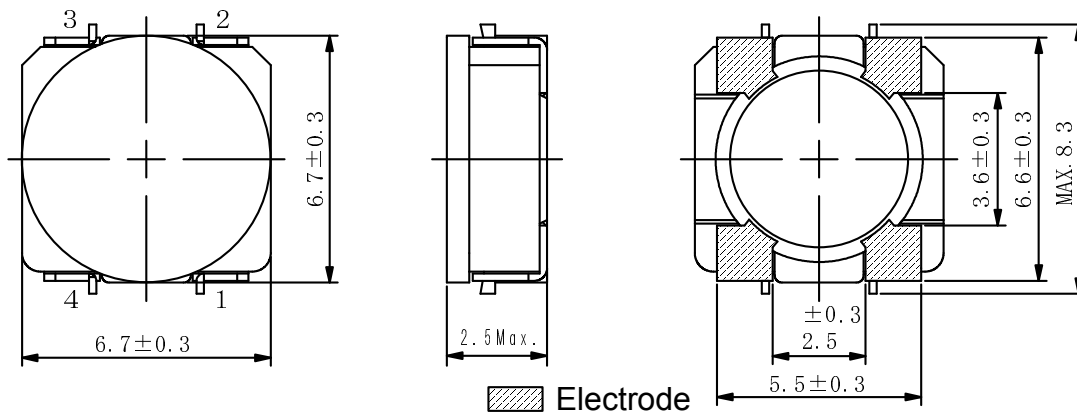
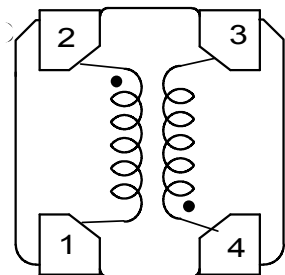


**Type: CLS6D23**
**◆ Description**

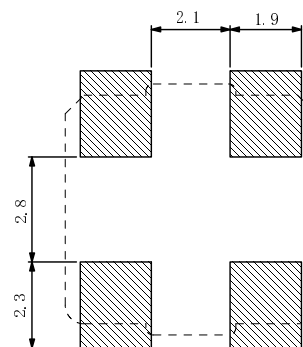
- 4 Terminal pins' type gives a flexible design as inductors or transformers.
- Can also be used as a coupled inductor, two single inductors connected in parallel, as 1:1 transformer or as an autotransformer when connected in series.
- Core material: Ferrite.
- Custom design is available.


**◆ Feature**

- Max. Operating frequency: 1MHz.
- 2 in 1 Coils for high efficiency up-down DC-DC converters.(SEPIC, Zeta, Cuk converter).
- Storage temperature range: -40°C~+105°C.
- Operating temperature range: -40°C~+105°C (including coil's self-heat).
- Product weight: 400mg(Ref.).
- Ideally used in the power supply for DSC、Note PC、DVC and W-LED backlighting.
- RoHS Compliance.

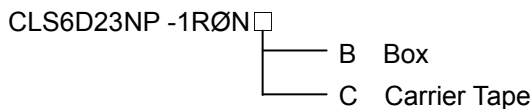
**◆ Dimensions (mm)**

**◆ Schematics (Bottom)**


“●” indicates polarity.

**◆ Land Pattern (mm)**


**Type: CLS6D23**
**◆ Specification**

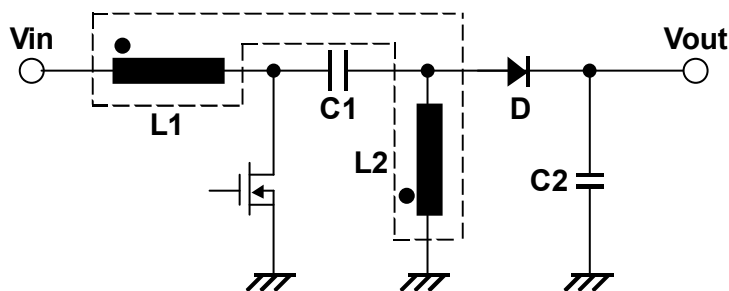
Part No.	Stamp	Inductance [Within]	D.C.R. [Max.] (mΩ) (at 20°C)※1		Saturation Current (A) ※2				Temperature Rise current (A) ※3	
			(2-1)	(4-3)	In parallel		In series		In parallel	In series
					at 20°C	at 100°C	at 20°C	at 100°C		
CLS6D23NP-1R0N□	1R0	1.0μH±30%	23(19)	29(23)	4.10	3.08	2.05	1.54	2.10	1.00
CLS6D23NP-1R5N□	1R5	1.5μH±30%	31(25)	40(32)	3.36	2.52	1.73	1.30	1.95	0.93
CLS6D23NP-2R0N□	2R0	2.0μH±30%	38(31)	45(36)	3.04	2.28	1.52	1.14	1.78	0.85
CLS6D23NP-3R0N□	3R0	3.0μH±30%	42(34)	52(42)	2.40	1.80	1.22	0.92	1.60	0.76
CLS6D23NP-4R6N□	4R6	4.6μH±30%	65(52)	86(69)	1.87	1.40	0.92	0.69	1.23	0.58
CLS6D23NP-6R8N□	6R8	6.8μH±30%	97(78)	125(101)	1.56	1.17	0.78	0.59	0.91	0.43
CLS6D23NP-100N□	100	10μH±30%	130(104)	190(153)	1.26	0.95	0.65	0.49	0.80	0.38
CLS6D23NP-150N□	150	15μH±30%	215(175)	285(229)	1.00	0.75	0.50	0.38	0.60	0.29
CLS6D23NP-220N□	220	22μH±30%	260(210)	350(279)	0.86	0.65	0.42	0.32	0.55	0.26
CLS6D23NP-330N□	330	33μH±30%	360(290)	480(385)	0.73	0.55	0.35	0.26	0.45	0.21
CLS6D23NP-470N□	470	47μH±30%	530(425)	730(587)	0.58	0.44	0.26	0.20	0.35	0.17
CLS6D23NP-680N□	680	68μH±30%	882(735)	1152(960)	0.45	0.34	0.22	0.17	0.28	0.13
CLS6D23NP-101N□	101	100μH±30%	1050(875)	1465(1220)	0.39	0.29	0.20	0.15	0.24	0.11

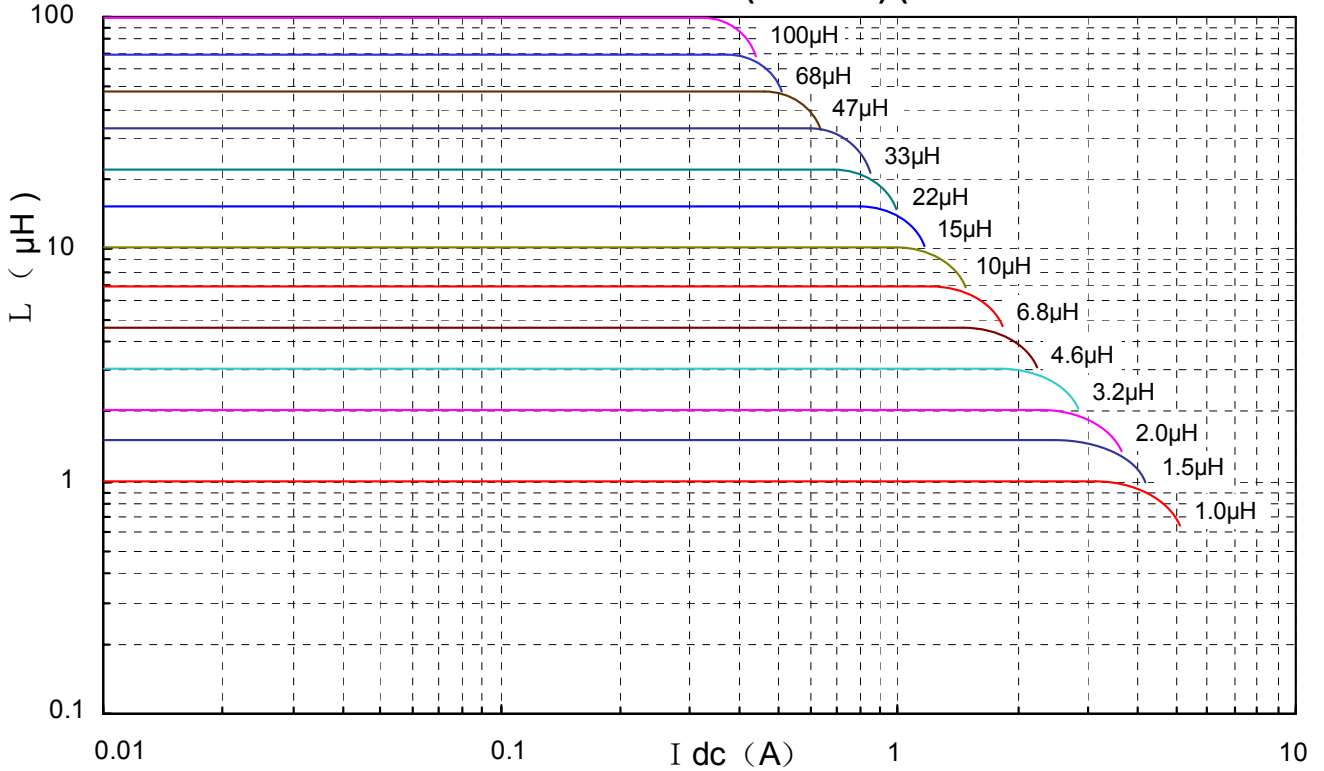
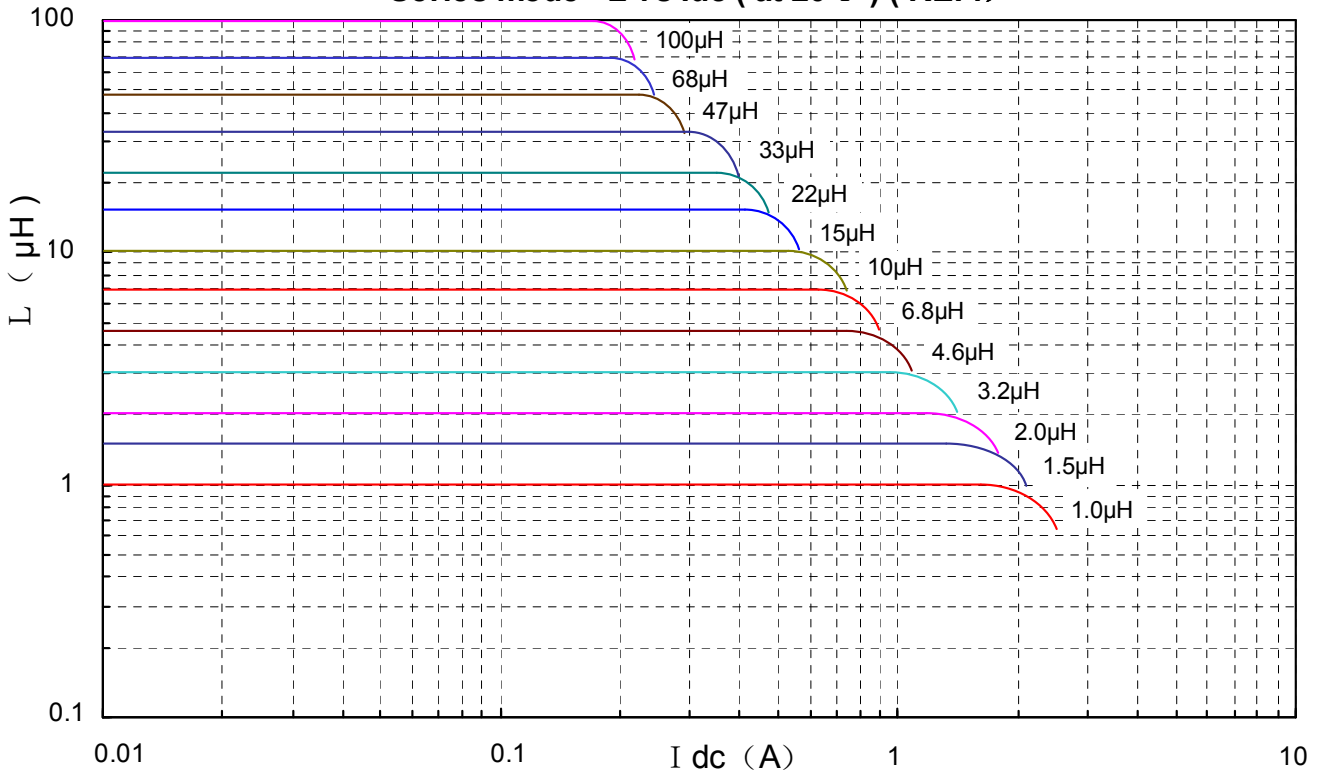
**※ Description of Part Name**


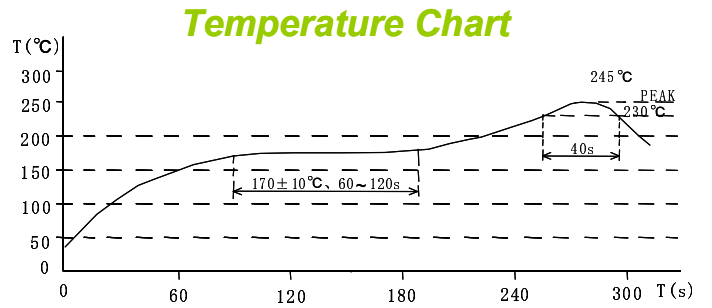
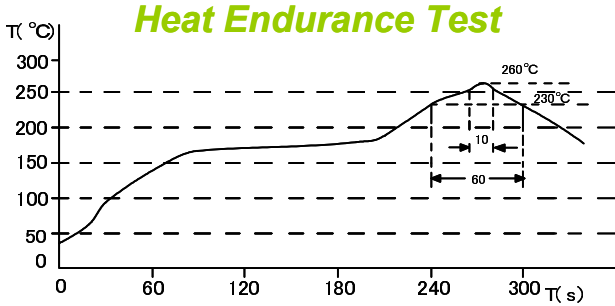
※1. ( ) typical value.

※2. Saturation Current: The DC current at which the inductance decreases to 90% of its initial value.

※3. Temperature rise current: The DC current at which the temperature rise is  $\Delta t=40^{\circ}\text{C}$ . ( $T_a=20^{\circ}\text{C}$ ).

**◆ Typical SEPIC Schematic**


**Type: CLS6D23**
**◆ Typical L Vs Current**
**Parallel mode L vs I<sub>dc</sub> ( at 20°C ) ( REF. )**

**Series mode L vs I<sub>dc</sub> ( at 20°C ) ( REF. )**


**Type: CLS6D23**
**◆ Recommendation Reflow Condition**

**◆ Packaging with Embossed Tape and Reel**

Qty.: 2000pcs/reel

