

#### **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.

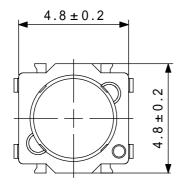


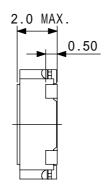
- · Core material: Ferrite.
- · Custom design is available.

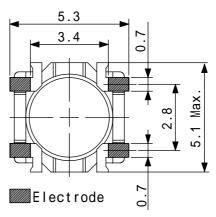
#### **Feature**

- · Max. Operating frequency: 1MHz.
- 2 in 1 Coils for high efficiency up-down DC-DC converters.(SEPIC, Zeta, Cuk converter).
- Storage temperature range: -40 ~+105
- Operating temperature range: -40 ~+105 (including coil's self-heat).
- · Product weight: 140mg(Ref.).
- Ideally used in the power supply for DSC, Note PC, DVC and W-LED backlighting.
- · RoHS Compliance.

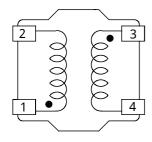
### **Dimensions (mm)**







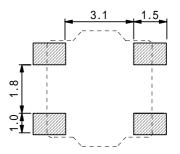
### **Schematics (Bottom)**



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" indicates polarity.

## Land Pattern (mm)





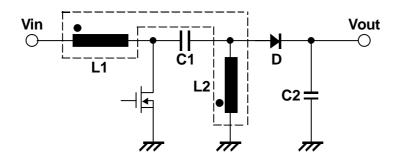
### **Specification**

Part No.	Stamp	Inductance [ Within ]	D.C.R. [Max.] (m )		Saturation Current ( A )				Temperature Rise current (A) 3	
			(at 20 ) 1		In parallel		In series		In	In
			(2-1)	(4-3)	at 20	at 100	at 20	at 100	parallel	series
CLS4D18-1R0N	Α	1.0µH±30%	52(40)	64(49)	2.10	1.40	1.00	0.77	3.0	1.5
CLS4D18-1R8N	В	1.8µH±30%	69(53)	85(65)	1.50	1.10	0.72	0.56	2.7	1.2
CLS4D18-2R2N	С	2.2µH±30%	75(58)	95(73)	1.20	0.96	0.62	0.51	2.4	1.1
CLS4D18-3R3N	D	3.3µH±30%	95(72)	120(94)	1.10	0.80	0.52	0.40	2.3	0.9
CLS4D18-5R0N	Е	5.0µH±30%	145(114)	185(145)	0.96	0.70	0.45	0.34	1.8	0.7
CLS4D18-6R8N	F	6.8µH±30%	175(134)	230(178)	0.72	0.62	0.39	0.30	1.6	0.65
CLS4D18 -100N	G	10µH±30%	310(240)	415(320)	0.64	0.51	0.32	0.26	1.2	0.47

## **Description of Part Name**

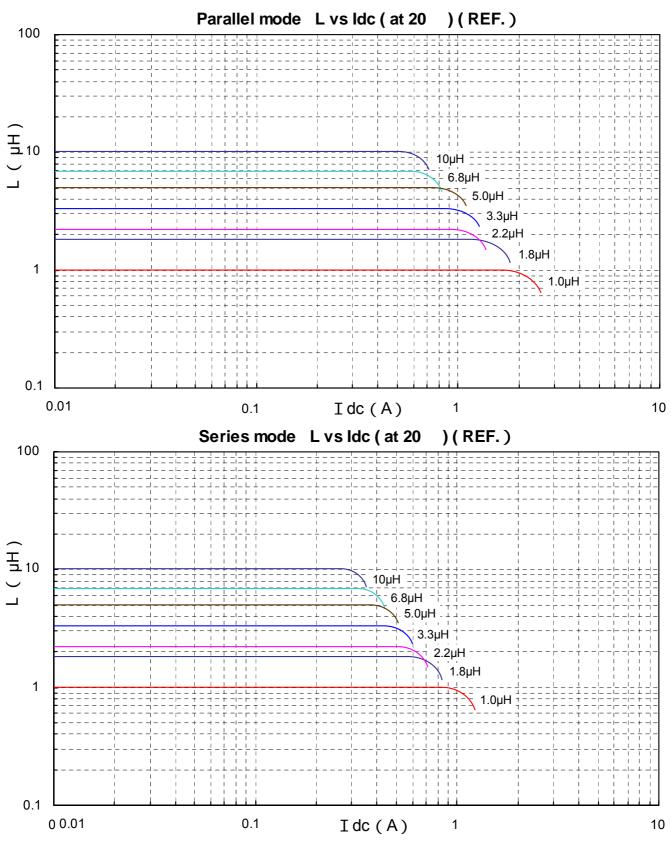
- 1. ( ) typical value.
- 2. Saturation Current: The DC current at which the inductance decreases to 90% of it's nominal value.
- 3. Temperature rise current: The DC current at which the temperature rise is t = 40 . (Ta = 20).

### **Typical SEPIC Schematic**



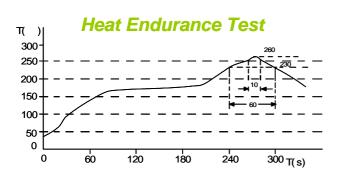


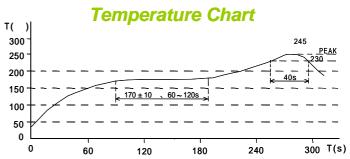
## Typical L Vs Current ( REF. )





#### **Recommendation Reflow Condition**





## **Packaging with Embossed Tape and Reel**

Qty.: 1000pcs/reel

