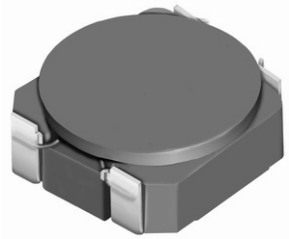
Type: CLS3D23

Under Development



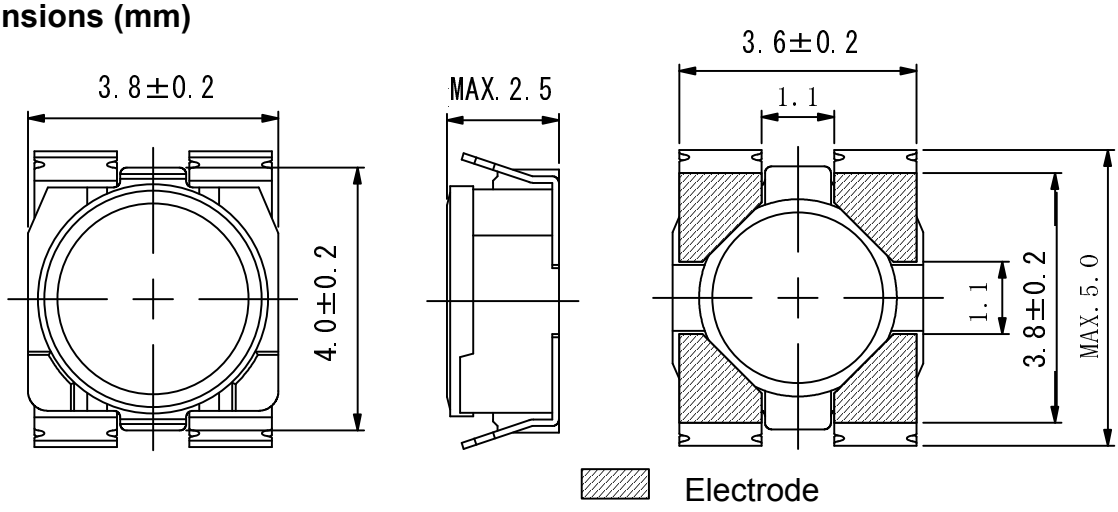
◆ Description

- 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.

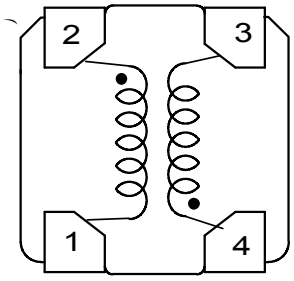
◆ Feature

- 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: 100mg(Ref.).
- Ideally used in the power supply for DSC、Note PC、DVC and W-LED backlighting.
- RoHS Compliance.

◆ Dimensions (mm)

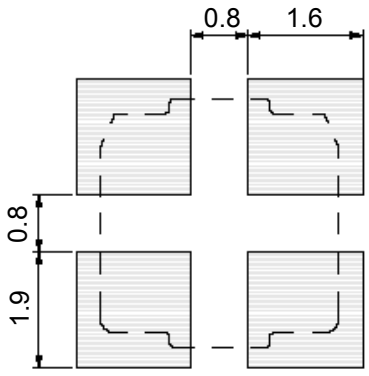


◆ Schematics (Bottom)



"●" indicates polarity.

◆ Land Pattern (mm)



Type: CLS3D23

◆ Specification

Part No.	Stamp	Inductance (μH) [Within]	D.C.R. [Max.] (mΩ) (at 20℃)※1		Saturation Current (A) ※2				Temperature Rise current (A) ※3	
					In parallel		In series		In parallel	In series
			(2-1)	(4-3)	at 20℃	at 100℃	at 20℃	at 100℃		
CLS3D23NP-1R0N□	A	1.0±30%	59(47)	53(42)	2.18	1.84	1.05	0.89	2.11	1.18
CLS3D23NP-1R5N□	B	1.5±30%	65(52)	62(49)	1.92	1.62	0.91	0.80	2.06	0.97
CLS3D23NP-2R2N□	C	2.2±30%	90(72)	78(62)	1.71	1.51	0.90	0.75	1.89	0.81
CLS3D23NP-3R3N□	D	3.3±30%	114(91)	95(76)	1.42	1.21	0.66	0.63	1.47	0.72
CLS3D23NP-4R7N□	E	4.7±30%	159(127)	135(108)	0.97	0.91	0.47	0.44	1.36	0.54
CLS3D23NP-7R4N□	F	7.4±30%	208(166)	169(135)	0.85	0.64	0.43	0.37	0.99	0.49
CLS3D23NP-100N□	G	10±30%	345(276)	288(230)	0.70	0.59	0.36	0.32	0.94	0.38

※ Description of Part Name

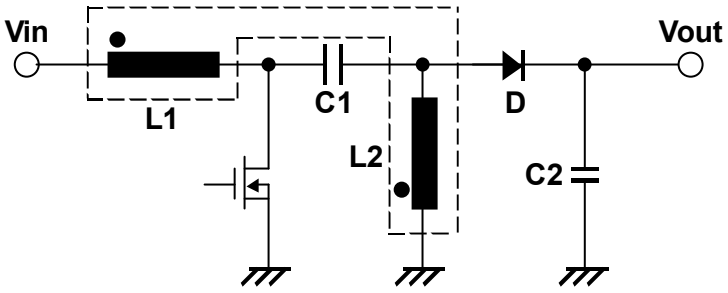
CLS3D23NP -1R0N□
- B Box
- C Carrier Tape

※1. ( ) typical value.

※2. Saturation Current: The DC current at which the inductance decreases to 90% of it's nominal value.

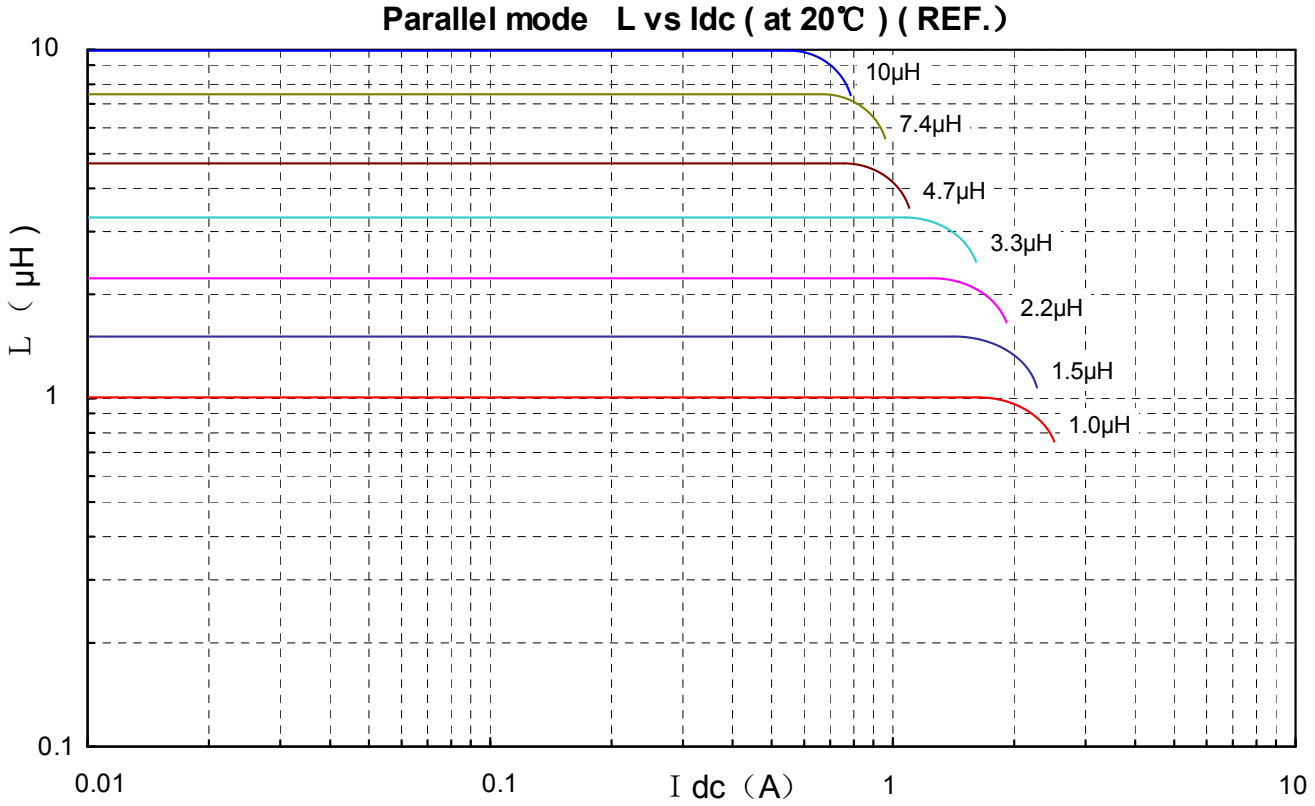
※3.Temperature rise current: The DC current at which the temperature rise is △t＝40℃.(Ta＝20℃).

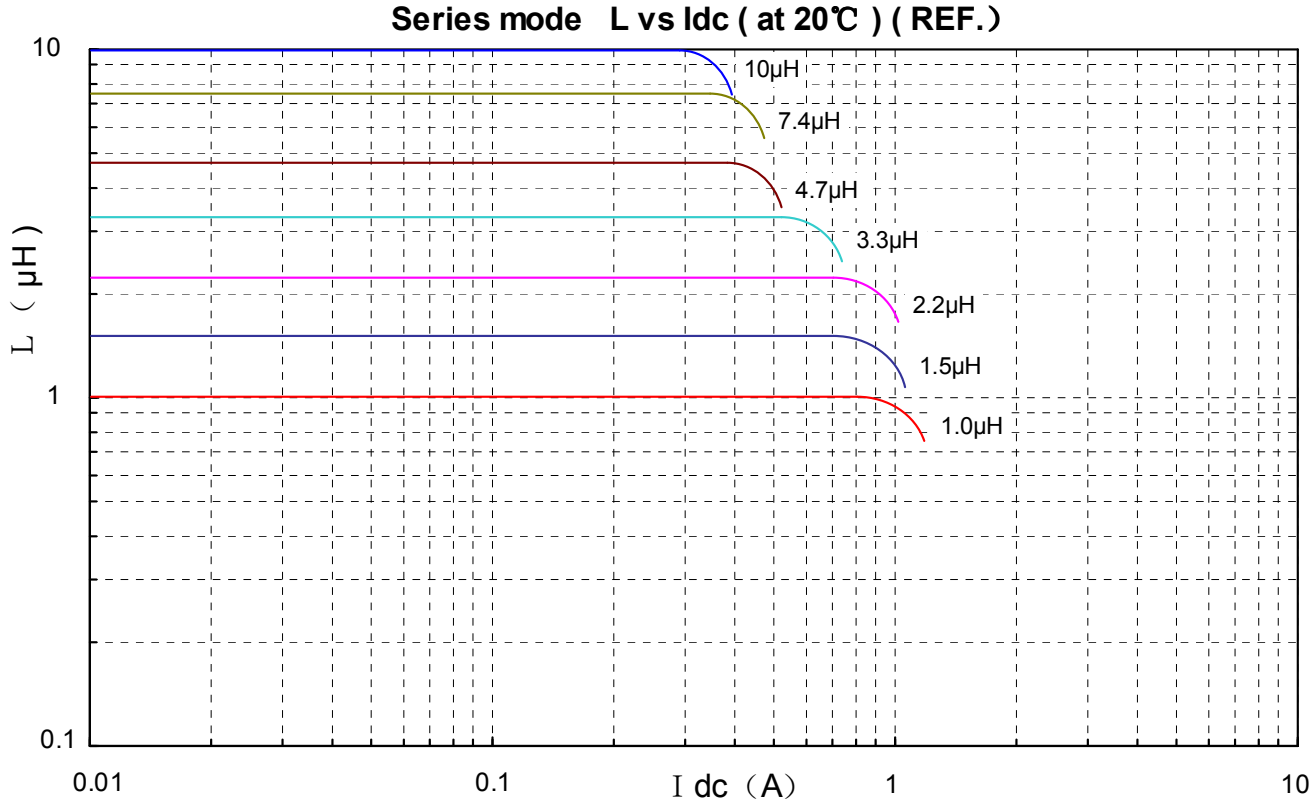
◆ Typical SEPIC Schematic



Type: CLS3D23

◆ Typical L Vs Current





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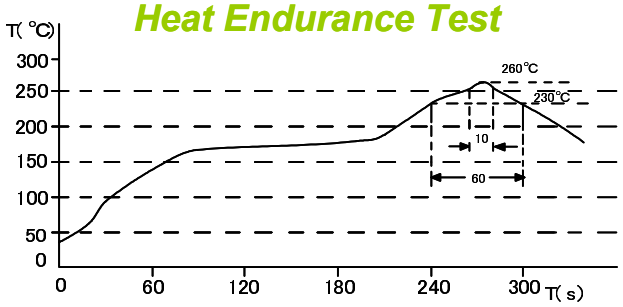
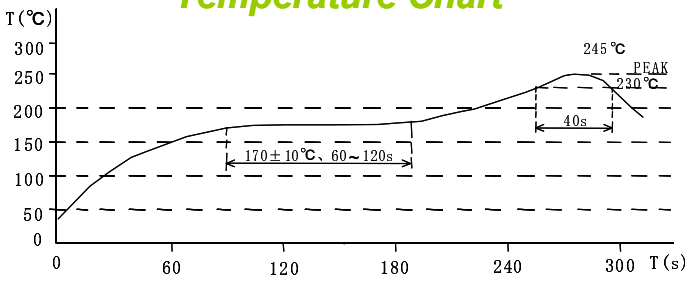
◆ Recommendation Reflow Condition

Heat Endurance Test



Temperature Chart



◆ Packaging with Embossed Tape and Reel

Qty.: 2000pcs/reel