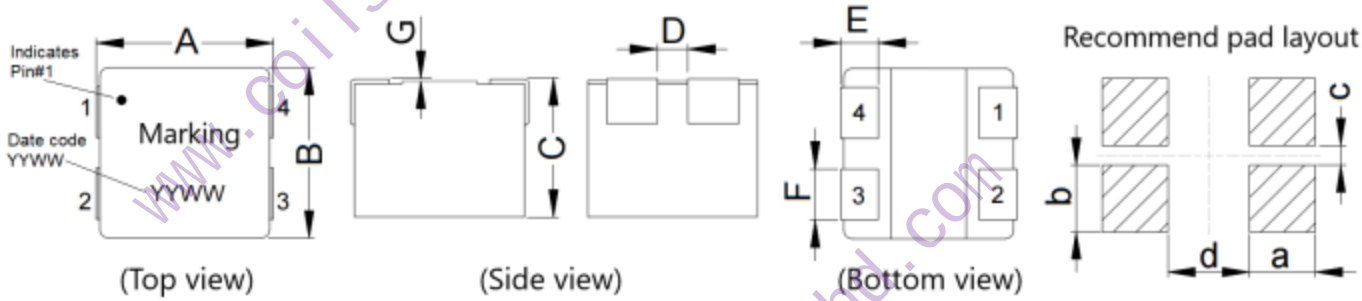
1. Features:

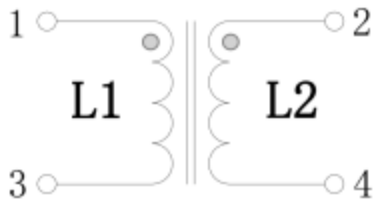
- Full magnetic shielded type designed for the applications of inductance value range from10uH to 22uH with high current (Isat 7.3~11.2A, Irms 3.3~5.0A) , and mini-size(L*W*H=10.9*10.0*7.9).
- Robust molded construction,dual winding, ideal for SEPIC(DC/DC) converters.
- 500Vrms, one minutes isolation between Coils and Ferrite Core.
- Over 100MΩ insulating resistance at 100Vdc between Coils and Ferrite Core.
- Magnetic shielded structure, excellent resistance to electro-magnetic interference(EMI).
- Operating temperature range: -55℃ to +155℃(Including coil temperature rise due to self-generated heat).
- Storage temperature range: -20℃ to +85℃.
- Design, material selection, and manufacturing process meet AEC-Q200 requirements.
- RoHS Compliant.

2. Appearance dimensions (mm/inch):



(Top view) (Side view) (Bottom view)

Schematic



indicates the same polarity.

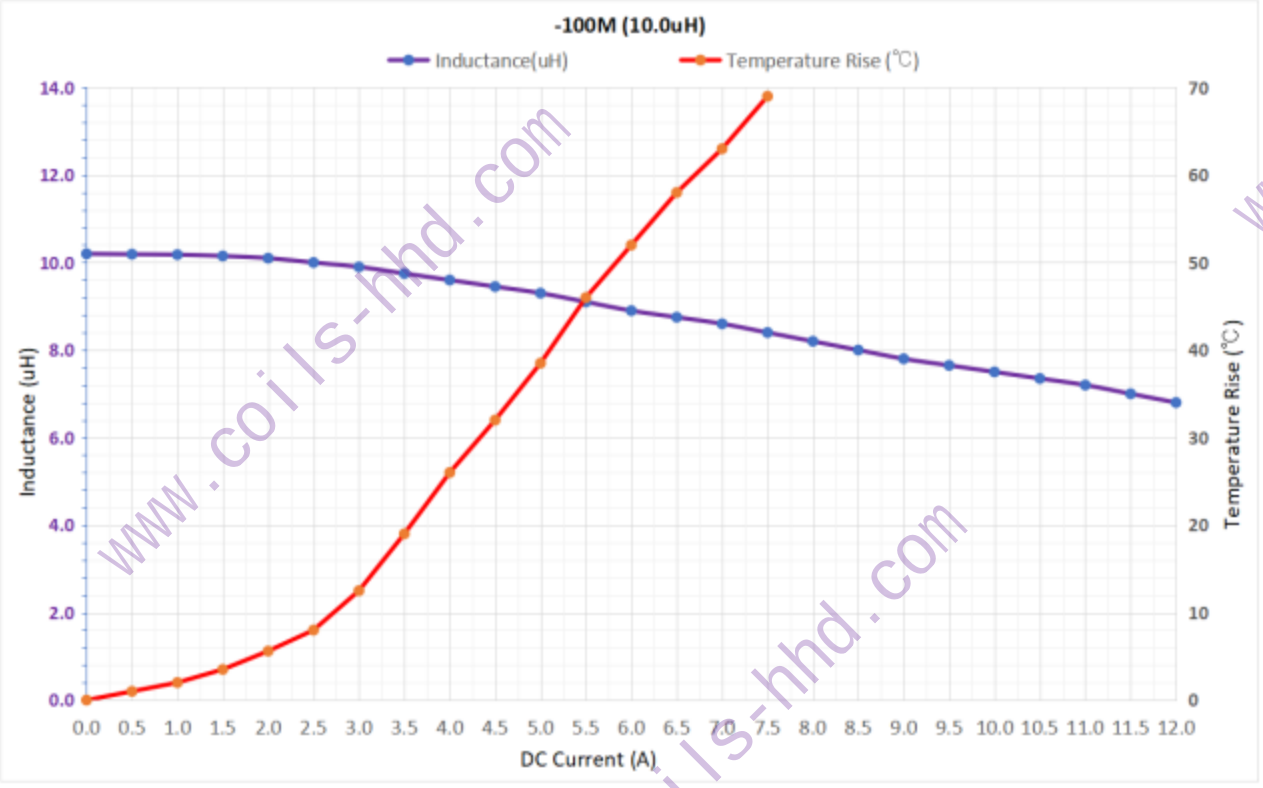
	mm	inch
A	10.9±0.35	0.429±0.014
B	10.0±0.30	0.394±0.012
C	7.9 Max.	0.311 Max.
D	1.6 Ref.	0.063 Ref.
E	2.4±0.5	0.094±0.020
F	3.1±0.5	0.122±0.020
G	0.05~0.25	0.002~0.010
a	4.0 Ref.	0.157 Ref.
b	3.8 Ref.	0.150 Ref.
c	1.4 Ref.	0.055 Ref.
d	5.0 Ref.	0.197 Ref.

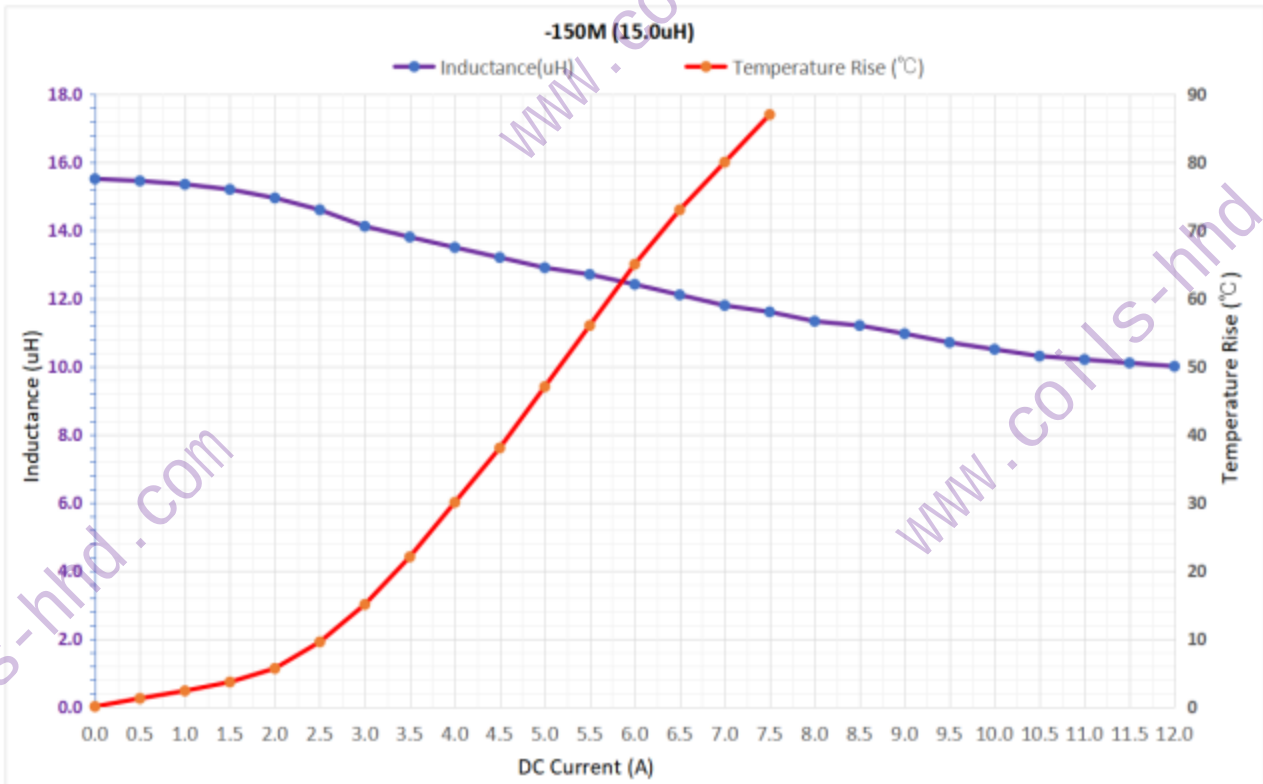
3. Electronic characteristics :

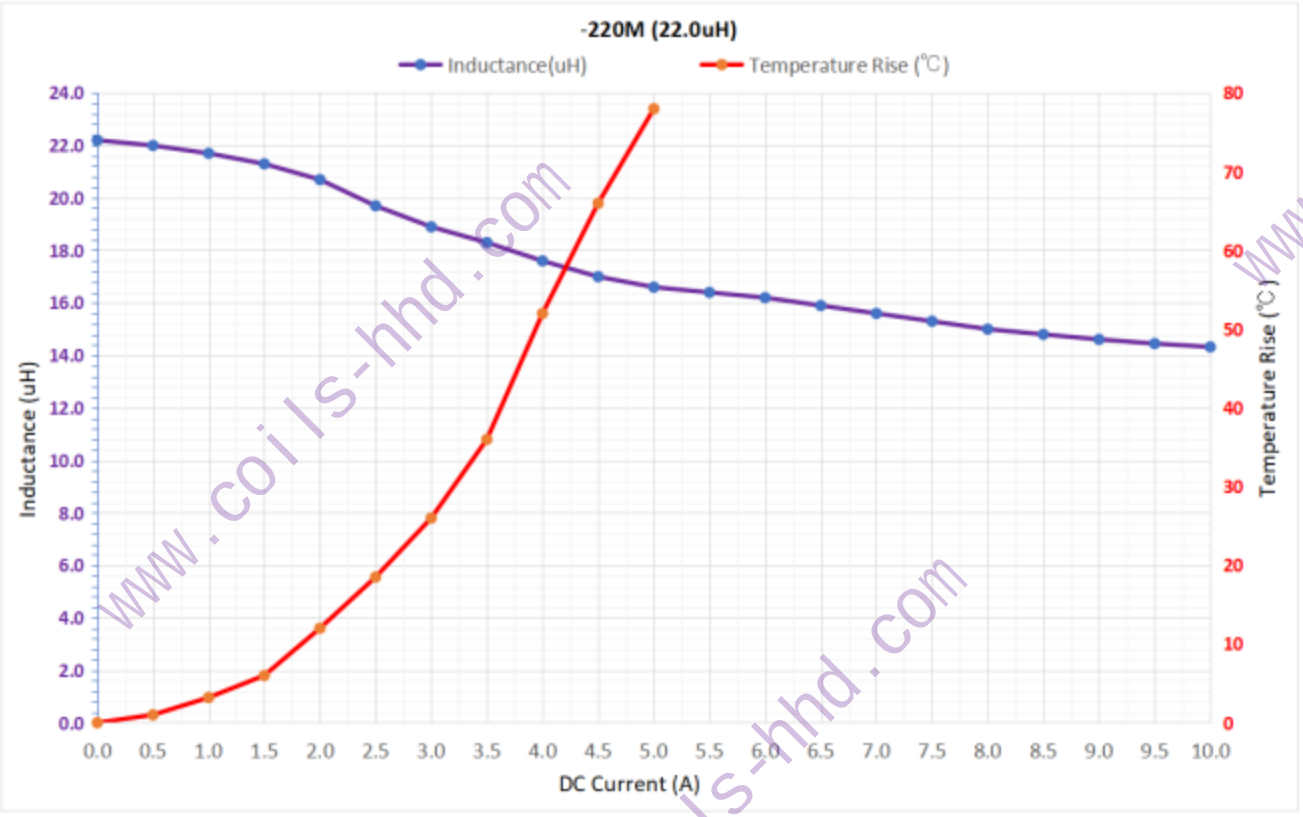
Part No.		Inductance (μH) @ 100kHz/1Vrms	DCR (mΩ) @25℃	Isat (A) (Typ.)	Irms (A) (Typ.)	Marking
Eaton	HHd					
HCSA1V1008-100-R	HCM1V1008-100M	10.0±20%	45.0 Max.	11.2	5.0	100M
HCSA1V1008-150-R	HCM1V1008-150M	15.0±20%	64.5 Max.	9.1	4.6	150M
HCSA1V1008-220-R	HCM1V1008-220M	22.0±20%	84.0 Max.	7.3	3.3	220M

Remarks:
* All test data is referenced to 25℃ ambient temperature .
* Test equipment: VC4092B, TH2516B, HP4284/HP4284A ,HP4285 or equivalent .
* Isat: The value of DC current at which the inductance value drops approximately 30% from its initial value.
* Irms: DC current that causes the temperature rise (△T=40℃) from 25℃.

4. Characteristics cure:



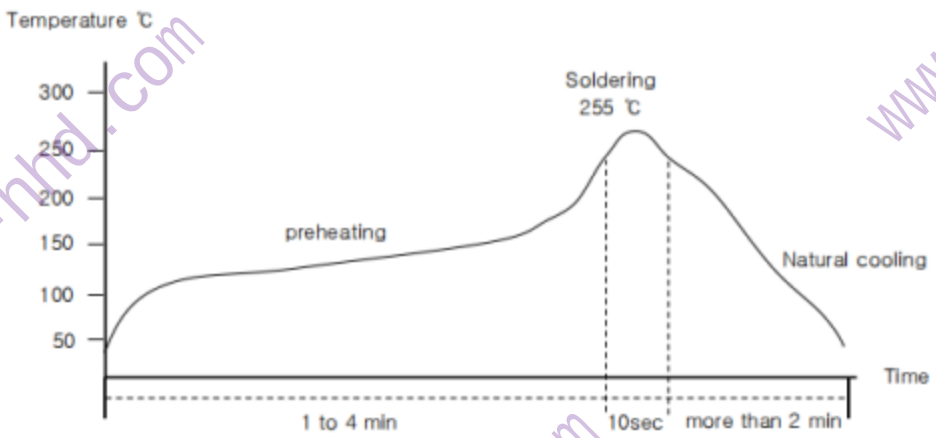




5. General characteristics:

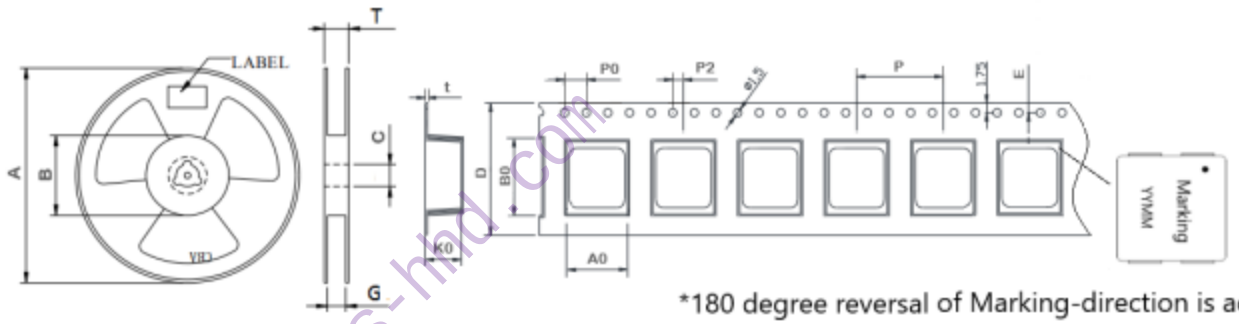
No.	Item	Specification	Test method
1	Storage temperature range	-20℃ ~ 85℃	
2	Operation temperature range	-55℃ ~ 155℃ (Including coils's temperature rise)	
3	External appearance	No external defect can be found by visual inspection	
4	Dielectric Strength	Over 100 MΩ at 100V D.C . between wire and core	
5	Dielectric Strength	Apply at 0.5KV 3mA for 1 minute between wire and core	
6	Solderability test	90% min. of the immersed areas should be covered by new solder(Sn-0.3Ag-0.5Cu)	Terminals are immersed in flux for 5 seconds, then dipped in melting solder at 245 ± 5℃ foe 5 ± 0.5 seconds. *Flux composition:25% rosin(JIS-K-5920)+75% ethanol (JIS-K-8101). *Pre-treatment : PCT:105℃/100%RH/1.22atm/*H.
7	Terminal Strength		After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec.Terminal should not peel off. (Refer to figure at right)
8	Vibration test	Electronic characteristics shall be satisfied	Vibrating at the frequency varying uniformly from 10Hz to 2000Hz then return to 10Hz in 20 minutes at the acceleration of 5G for 4 hours in each of 3 mutually prependicular directions.
9	Heat resistance	Appearance : No damage Inductance change from the initial value: within ± 10 %	Temperature : 180 °C ±2°C Time : 1000 h (+48h , -0h) Then measured after exposure in the room condition for 24±2 hours.
10	Cold resistance		Temperature : - 60 °C ± 2°C Time : 1000 h (+48h , -0h) Then measured after exposure in the room condition for 24±2 hours.
11	Humidity		Temperature : 40 °C ± 2 °C Humidity : 90 %(RH) to 95 %(RH) Time : 1000 h (+48h , -0h) Then measured after exposure in the room condition for 24±2 hours.
12	Temperature cycle (Shock testing)		1 cycle : 1 step : - 55 °C ± 2 °C / 30 min ± 3 min 2 step : Ordinary temp. / 10 min to 15 min 3 step : + 155°C ± 2 °C / 30 min ± 3 min 4 step : Ordinary temp. / 10 min to 15 min Total of 10 cycles Then measured after exposure in the room condition for 24±2 hours.
13	Heat endurance of reflowsoldering		Refer to figure (IR Reflow profile)

IR Reflow profile



6. Packing :

***Dimension (mm):**



*180 degree reversal of Marking-direction is acceptable.

STAYLE	QTY (PCS)	A	B	C	D	G	E	T	A0	B0	K0	t	P	P0	P2
13"	500	330	60	13.5 ±0.5	24.0 ±0.2	25.0 ±0.5	11.5 ±0.1	29.0 ±2.0	10.8	11.6	8.5	0.35	16.0 ±0.1	4.0 ±0.1	2.0 ±0.1

***Packing Quantity 包装数量 :**

Quantity / Reel 数量 / 卷	Quantity / Inner Box 数量 / 内盒	Quantity / Outside Carton 数量 / 外箱	N.W. / Outside Carton 净重 / 外箱	G.W. / Outside Carton 毛重 / 外箱
500 pcs	(500x2)1000pcs	(1000x3)3000pcs	11~13 kg	12.5~15 kg
* Packing Quantity may vary depending on the order volume. 包装数量会因应订单量而异。				

*** Label 标签:**

All the labels on the reel , inner box and outer box are the same, and the format and content of the label is shown as the right table.
(Production Lot/ batch number refers to the week number(YYWW))
外箱、内箱、卷盘标签相同， 标签的格式和内容如右表所示。
（生产批号：耐 YYWW 周期号）

品番/物料编码 Part No./Material code	
规格型号 Model,description	
数　　量 Quantity	
批　　号 Lot. No.	