SMD Power Inductor CDH115

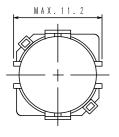


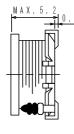


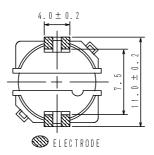




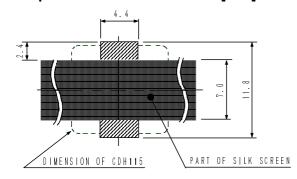
Dimension - [mm]

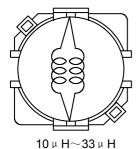


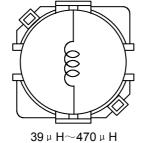




Land pattern and Schematics - [mm]







Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 11.2 × 11.2 × 5.2 mm Max.
- Product weight: 1.6g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Environmental Data

- Operating temperature range: -40°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

Packaging

- · Carrier tape and reel packaging.
- 12.9"diameter reel
- 500pcs per reel

Applications

 Ideally used in Notebook PC ,DVD, LCD TV ,Game machine, Projector etc as DC-DC converter inductors.

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SMD Power Inductor CDH115





Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R.(Ω) Max. (Typ.) (at 20°C)	Rated Current (A) %2
CDH115NP-100MC	100	10±20%	28m(22m)	3.00
CDH115NP-120MC	120	12±20%	33m(25m)	2.80
CDH115NP-150MC	150	15±20%	39m(30m)	2.50
CDH115NP-180LC	180	18±15%	49m(38m)	2.25
CDH115NP-220LC	220	22±15%	60m(46m)	2.10
CDH115NP-270LC	270	27±15%	70m(54m)	1.84
CDH115NP-330LC	330	33±15%	82m(63m)	1.68
CDH115NP-390KC	390	39±10%	0.11(85m)	1.52
CDH115NP-470KC	470	47±10%	0.13(0.10)	1.36
CDH115NP-560KC	560	56±10%	0.14(0.11)	1.28
CDH115NP-680KC	680	68±10%	0.16(0.12)	1.20
CDH115NP-820KC	820	82±10%	0.21(0.16)	1.04
CDH115NP-101KC	101	100±10%	0.26(0.20)	0.96
CDH115NP-121KC	121	120±10%	0.29(0.22)	0.88
CDH115NP-151KC	151	150±10%	0.40(0.31)	0.76
CDH115NP-181KC	181	180±10%	0.45(0.35)	0.72
CDH115NP-221KC	221	220±10%	0.53(0.40)	0.66
CDH115NP-271KC	271	270±10%	0.73(0.56)	0.59
CDH115NP-331KC	331	330±10%	0.84(0.65)	0.53
CDH115NP-391KC	391	390±10%	1.10(0.84)	0.48
CDH115NP-471KC	471	470±10%	1.24(0.96)	0.45

 $^{\,\%\,1.}$ Inductance measuring condition: at 1kHz.

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[&]amp;2. Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when $\triangle t = 40^{\circ}C$, whichever is lower (Ta=20 $^{\circ}C$)

SMD Power Inductor CDH115



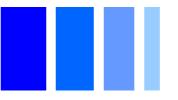


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Saturation Current & Temperature Rise Graph - L (20°C) − L (100°C) L (μH) 1. CDH115NP-100MC L (μ H) 2. CDH115NP-120MC L (μ H) 3. CDH115NP-150MC $\triangle T (\mathcal{C})$ $\triangle T$ (°C) $\triangle T (^{\circ}C)$ $\overset{2}{\text{DC (A)}}^3$ $\overset{2}{\text{DC}}$ (A) 2DC (A) L (μH)^{4.} CDH115NP-180LC L (μH)^{5.} CDH115NP-220LC L (μH)6. CDH115NP-270LC $\triangle T$ (°C) △T (°C) $\triangle T$ (°C) 0.0 0.6 1.2 1.8 2.4 3.0 3.6 DC (A) DC (A) DC (A) 7. CDH115NP-330LC (μH) $_{\rm L~(~\mu~H)}^{\rm -8.~CDH115NP-390KC}$ 9. CDH115NP-470KC △T (°C) △T (°C) $\triangle T$ (°C) $0. \ 0 \ \ 0.6 \ \ 1. \ 2 \ \ 1. \ 8 \ \ 2. \ 4 \ \ 3. \ 0 \ \ 3. \ 6$ $0. \ 0 \ 0.5 \ 1.0 \ 1.5 \ 2.0 \ 2.5 \ 3.0$ 0.0 0.5 1.0 1.5 2.5 DC (A) DC (A) DC (A) L (μH) 10. CDH115NP-560KC $L (\mu H)$ 12. CDH115NP-820KC $_{\rm L~(\mu~H)}$ 11. CDH115NP-680KC $\triangle T$ (°C) $\triangle T$ (°C) $\triangle T (\mathcal{C})$ Ω Ω n 0.0 0.5 1.0 1.5 2.0 2.5 0.0 0.4 0.8 1.2 1.6 2.0 2.4 0.0 0.4 0.8 1.2 1.6 DC (A) DC (A) DC (A)

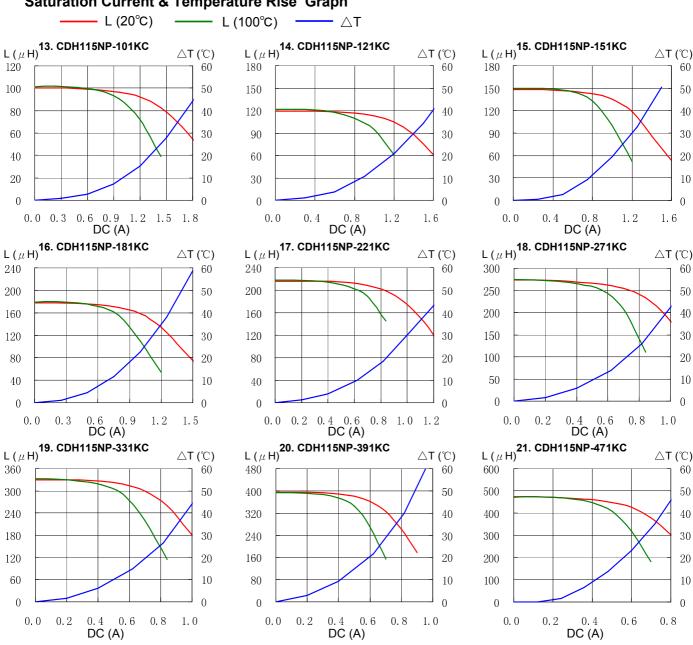
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Saturation Current & Temperature Rise Graph



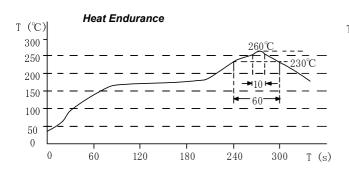
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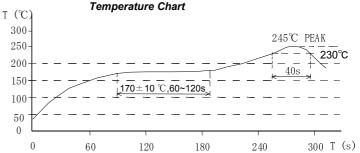
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Solder Reflow Condition





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