

# POWER INDUCTORS <SMD Type>

## CDEP Series

### OUTLINE / 概要

By using the square wire, power inductors can be used for large currents with low profile and low resistance.  
 平角線を使用する事により、薄形・低抵抗で大電流対応を実現しました。

### SHIELDED TYPE / 閉磁路タイプ

## CDEP134



(0.3μH - 8.0μH)

| DIMENSIONS (mm)<br>外形寸法図 | LAND PATTERNS (mm)<br>推奨ランド寸法 | CONNECTION<br>端子接続       | CONSTRUCTION<br>磁気構造図 |
|--------------------------|-------------------------------|--------------------------|-----------------------|
|                          |                               | <p>BOTTOM VIEW / 裏面図</p> |                       |

## CDEP145



(0.56μH - 6.1μH)

**NEW**

| DIMENSIONS (mm)<br>外形寸法図 | LAND PATTERNS (mm)<br>推奨ランド寸法 | CONNECTION<br>端子接続       | CONSTRUCTION<br>磁気構造図 |
|--------------------------|-------------------------------|--------------------------|-----------------------|
|                          |                               | <p>BOTTOM VIEW / 裏面図</p> |                       |

## TYPE : CDEP134 (Standard Type), CDEP134 (High Power Type)

| Parts No. | L (H) | CDEP134 (Standard Type) |                                 |      |   | CDEP134 (High Power Type) |                                 |      |   |
|-----------|-------|-------------------------|---------------------------------|------|---|---------------------------|---------------------------------|------|---|
|           |       | D.C.R.(Ω) : Max.(Typ.)  | Saturation Rated Current (A) *E |      | Temperature Rise Current (Typ.) (A) *IV | D.C.R.(Ω) : Max.(Typ.)    | Saturation Rated Current (A) *E |      | Temperature Rise Current (Typ.) (A) *IV |
|           |       |                         | 20℃                             | 100℃ |   |                           | 20℃                             | 100℃ |   |
| 0R3       | 0.3μ  |                         |                                 |      | 1.9m( 1.6m)                             | 35.0                      | 32.0                            | 18.5 |   |
| 0R4       | 0.4μ  | 1.9m( 1.6m)             | 32.0                            | 27.0 | 18.5                                    |                           |                                 |      |   |
| 0R6       | 0.66μ |                         |                                 |      | 2.5m( 2.1m)                             | 29.6                      | 24.0                            | 17.0 |   |
| 0R9       | 0.9μ  | 2.5m( 2.1m)             | 21.6                            | 18.4 | 17.0                                    |                           |                                 |      |   |
| 1R2       | 1.2μ  |                         |                                 |      | 3.7m( 3.1m)                             | 21.0                      | 17.6                            | 15.0 |   |
| 1R6       | 1.6μ  | 3.7m( 3.1m)             | 16.0                            | 13.8 | 15.0                                    |                           |                                 |      |   |
| 1R8       | 1.8μ  |                         |                                 |      | 6.6m( 5.5m)                             | 17.6                      | 14.4                            | 10.5 |   |
| 2R5       | 2.5μ  | 6.6m( 5.5m)             | 12.8                            | 11.0 | 10.5                                    |                           |                                 |      |   |
| 2R7       | 2.7μ  |                         |                                 |      | 10.8m( 9.0m)                            | 14.7                      | 12.0                            | 8.0  |   |
| 3R6       | 3.6μ  | 10.8m( 9.0m)            | 10.9                            | 9.1  | 8.0                                     | 12.0m(10.0m)              | 12.5                            | 10.2 | 7.5                                     |
| 4R8       | 4.8μ  | 12.0m(10.0m)            | 9.3                             | 8.0  | 7.5                                     | 16.3m(13.6m)              | 11.0                            | 9.0  | 7.0                                     |
| 6R0       | 6.0μ  |                         |                                 |      | 18.4m(15.3m)                            | 9.6                       | 8.0                             | 6.5  |   |
| 6R4       | 6.4μ  | 16.3m(13.6m)            | 8.0                             | 6.8  | 7.0                                     |                           |                                 |      |   |
| 8R0       | 8.0μ  | 18.4m(15.3m)            | 7.2                             | 6.1  | 6.5                                     |                           |                                 |      |   |

Measuring Freq. (L) / インダクタンス測定周波数 (L)

CDEP134(S) 100kHz  
CDEP134(H) 100kHz

Ordering Code / 品名表記法

CDEP134 - ΔΔΔΔX - □□

Tolerance of Inductance / インダクタンス公差

CDEP134(S) 0.4μH ± 30% (N), 0.9μH - 8.0μH ± 20% (M)  
CDEP134(H) 0.3μH - 0.66μH ± 30% (N), 1.2μH - 6.0μH ± 20% (M)
 Δ : Parts No.    ○ : Tolerance of inductance    × : Packing    □ :  
 M (20%)    C (Carrier tape)    Nothing (Standard type)  
 N (30%)    B (Box)    H (High power type)

Other / その他

\*E Saturation Rated Current : The current either the inductance value becomes 35% (tolerance ± 30%) lower than its nominal value or becomes 25% (tolerance ± 20%) lower than its nominal value. (Ta=20℃)

\*E 直流通重許容電流:直流通重許容電流を流した時、インダクタンスが公称インダクタンスの65%以上(インダクタンスの公差が±30%時)、又は75%以上(インダクタンスの公差が±20%時)となる電流値とする。(Ta=20℃)

\*IV Temperature Rise Current (Typ.) : The actual current when temperature of coil becomes ΔT=40℃. (Ta=20℃)

\*IV 温度上昇実力電流:直流通重許容電流を流した時、コイルの温度上昇がΔT=40℃となる電流の実力値とする。(Ta=20℃)

About Lead-free products / 無鉛製品について

- Lead-free products are now available for sale
- To order a lead-free product, please add "NP" after the product type:
- 無鉛製品は現在、販売されております。
- ご注文の際は製品タイプ名の後に "NP" をつけてください。
- e.g. lead product: Type name-ΔΔΔΔX
- lead-free product: Type name NP ΔΔΔΔX

## TYPE : CDEP145 (Standard Type), CDEP145 (High Power Type)

| Parts No. | L (H) | CDEP145 (Standard Type) |                                 |      |   | CDEP145 (High Power Type) |                                 |      |   |
|-----------|-------|-------------------------|---------------------------------|------|---|---------------------------|---------------------------------|------|---|
|           |       | D.C.R.(Ω) : Max.(Typ.)  | Saturation Rated Current (A) *B |      | Temperature Rise Current (Typ.) (A) *IV | D.C.R.(Ω) : Max.(Typ.)    | Saturation Rated Current (A) *B |      | Temperature Rise Current (Typ.) (A) *IV |
|           |       |                         | 20℃                             | 100℃ |   |                           | 20℃                             | 100℃ |   |
| 0R5       | 0.56μ |                         |                                 |      | 1.7m( 1.4m)                             | 36.0                      | 31.2                            | 23.0 |   |
| 0R6       | 0.68μ | 1.7m( 1.4m)             | 30.0                            | 25.6 | 23.0                                    |                           |                                 |      |   |
| 1R2       | 1.2μ  |                         |                                 |      | 3.0m( 2.5m)                             | 25.0                      | 20.8                            | 19.5 |   |
| 1R5       | 1.5μ  | 3.0m( 2.5m)             | 19.8                            | 17.0 | 19.5                                    |                           |                                 |      |   |
| 2R2       | 2.2μ  |                         |                                 |      | 4.6m( 3.8m)                             | 19.2                      | 16.0                            | 15.0 |   |
| 2R7       | 2.7μ  | 4.6m( 3.8m)             | 15.2                            | 13.0 | 15.0                                    |                           |                                 |      |   |
| 3R5       | 3.5μ  |                         |                                 |      | 7.4m( 6.2m)                             | 15.4                      | 13.0                            | 12.0 |   |
| 4R2       | 4.2μ  | 7.4m( 6.2m)             | 12.3                            | 10.6 | 12.0                                    |                           |                                 |      |   |
| 5R0       | 5.0μ  |                         |                                 |      | 10.8m( 9.0m)                            | 13.1                      | 10.8                            | 9.5  |   |
| 6R1       | 6.1μ  | 10.8m( 9.0m)            | 10.4                            | 8.8  | 9.5                                     |                           |                                 |      |   |

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Tolerance of Inductance / インダクタンス公差

CDEP145(S) 0.68μH - 6.1μH ± 20% (M)  
CDEP145(H) 0.56μH - 5.0μH ± 20% (M)
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Other / その他

\*B Saturation Rated Current : The current when the inductance becomes 25% lower than its nominal value. (Ta=20℃)

\*B 直流通重許容電流:直流通重許容電流を流した時、インダクタンスが公称インダクタンスの75%以上となる電流値とする。(Ta=20℃)

\*IV Temperature Rise Current (Typ.) : The actual current when temperature of coil becomes ΔT=40℃. (Ta=20℃)

\*IV 温度上昇実力電流:直流通重許容電流を流した時、コイルの温度上昇がΔT=40℃となる電流の実力値とする。(Ta=20℃)

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- e.g. lead product: Type name-ΔΔΔΔX
- lead-free product: Type name NP ΔΔΔΔX