

# HIGH-CURRENT SURFACE-MOUNT POWER INDUCTORS

## CEP 104,105,124,125 HT SERIES

### FEATURES:

- High Frequency Design
- Shielded Construction
- Flat wire used
- Excellent Thermal Stability
- Low Profile, Low DCR.
- Super Large Current up to 28A
- Custom Inductors are available

### OPTIONS:

- Tape & Reel is Standard (Qty:600pcs.) Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

- Notebook, DC/DC Converters
- Communication System
- Automotive Systems Power supplier
- LCD PDP Televisions
- Network Systems
- Computer Peripheral Equipment
- CPU Power Supply

### ELECTRICAL CHARACTERISTICS:

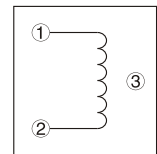
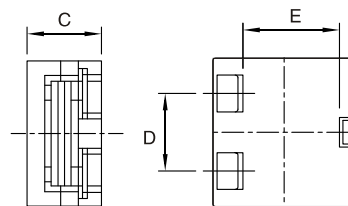
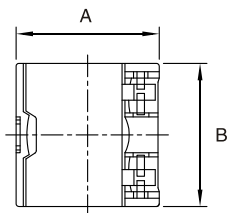
| Part Number    | Inductance (uH) | DCR (mΩ)Max | Isat (A) | Irms (A) |
|----------------|-----------------|-------------|----------|----------|
| CEP104HT-0R36N | 0.36 ± 30%      | 1.7         | 26.0     | 23.0     |
| CEP104HT-0R80M | 0.80 ± 20%      | 3.9         | 17.0     | 15.0     |
| CEP104HT-1R4M  | 1.40 ± 20%      | 4.4         | 14.0     | 13.0     |
| CEP104HT-2R2M  | 2.20 ± 20%      | 8.7         | 10.0     | 9.5      |
| CEP104HT-3R2M  | 3.20 ± 20%      | 10.4        | 8.0      | 8.0      |
| CEP105HT-0R36N | 0.36 ± 30%      | 1.7         | 26.0     | 28.0     |
| CEP105HT-0R80M | 0.80 ± 20%      | 2.5         | 18.0     | 20.0     |
| CEP105HT-1R4M  | 1.40 ± 20%      | 3.2         | 14.0     | 16.0     |
| CEP105HT-2R2M  | 2.20 ± 20%      | 5.8         | 10.0     | 12.0     |
| CEP105HT-3R2M  | 3.20 ± 20%      | 7.2         | 9.0      | 11.0     |
| CEP105HT-4R3M  | 4.30 ± 20%      | 8.5         | 8.0      | 10.0     |
| CEP105HT-5R7M  | 5.70 ± 20%      | 13.2        | 7.0      | 7.6      |
| CEP105HT-7R2M  | 7.20 ± 20%      | 15.5        | 6.2      | 7.0      |

| Part Number    | Inductance (uH) | DCR (mΩ)Max | Isat (A) | Irms (A) |
|----------------|-----------------|-------------|----------|----------|
| CEP105HT-8R8M  | 8.80 ± 20%      | 17.2        | 5.6      | 6.0      |
| CEP124HT-0R75M | 0.75 ± 20%      | 3.0         | 14.0     | 13.0     |
| CEP124HT-1R3M  | 1.30 ± 20%      | 4.5         | 13.0     | 12.0     |
| CEP124HT-2R0M  | 2.00 ± 20%      | 6.0         | 11.0     | 10.0     |
| CEP125HT-0R90N | 0.90 ± 30%      | 2.5         | 20.0     | 18.0     |
| CEP125HT-1R4N  | 1.40 ± 30%      | 3.4         | 16.0     | 15.0     |
| CEP125HT-2R0N  | 2.00 ± 30%      | 4.6         | 13.0     | 12.0     |
| CEP125HT-3R2N  | 3.50 ± 30%      | 9.0         | 9.0      | 8.6      |
| CEP125HT-4R6N  | 4.80 ± 30%      | 10.5        | 7.2      | 8.2      |
| CEP125HT-6R4N  | 6.80 ± 30%      | 11.0        | 6.0      | 7.8      |
| CEP125HT-8R2N  | 8.60 ± 30%      | 12.0        | 5.4      | 7.2      |
| CEP125HT-10R0N | 10.5 ± 30%      | 13.5        | 4.7      | 6.5      |

Note:1. K= ± 10%,M= ± 20%,N= ± 30%

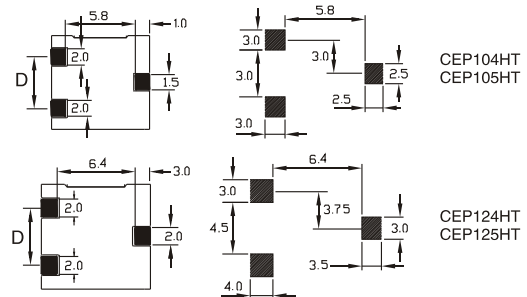
### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Inductance Testing: HP4284A, 100kHz/1V or equivalent
- RDC:QuadTech 1880 Milliohm meter
- Isat Current L value drop 65% typ.at I<sub>bc</sub> against its initial value
- Irms Temperature rise 40°CMax Reference Ambient temperature
- Solderability: 75% of the lead wire Shall be covered
- Soldering Methods: Wave,Reflow
- Operating Temperature:-40°C to +105°C
- Storage Temperature: -55°C to +125°C
- Terminal bending strength:24.5N Min
- Moisture resistance: ΔL/L ≤ ± 10% ΔQ/Q ≤ ± 25%



Dimensions(mm)

| Part Number | A           | B           | C           | D         | E         |
|-------------|-------------|-------------|-------------|-----------|-----------|
| CEP104HT    | 11.0 ± 0.30 | 9.35 ± 0.30 | 4.50 ± 0.30 | 6.00 ref. | 5.80 ref. |
| CEP105HT    | 11.0 ± 0.30 | 9.35 ± 0.30 | 5.50 ± 0.30 | 6.00 ref. | 5.80 ref. |
| CEP124HT    | 12.5 ± 0.30 | 12.5 ± 0.30 | 4.0 ± 0.30  | 7.50 ref. | 6.40 ref. |
| CEP125HT    | 12.5 ± 0.30 | 12.5 ± 0.30 | 5.0 ± 0.30  | 7.50 ref. | 6.40 ref. |

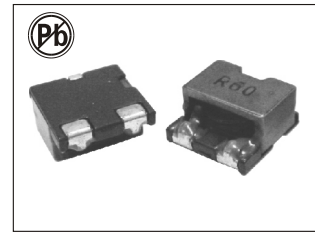


LAND PATTERN

Note:All specifications subject to change without notice.

# HIGH-CURRENT SURFACE-MOUNT POWER INDUCTORS

## CEP 126,135,159 HT SERIES



### FEATURES:

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### OPTIONS:

- Tape & Reel is Standard (Qty:600pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

- Notebook, DC/DC Converters
- Communication System
- Automotive Systems Power supplier
- LCD PDP Televisions
- Network Systems
- Computer Peripheral Equipment
- CPU Power Supply

## ELECTRICAL CHARACTERISTICS:

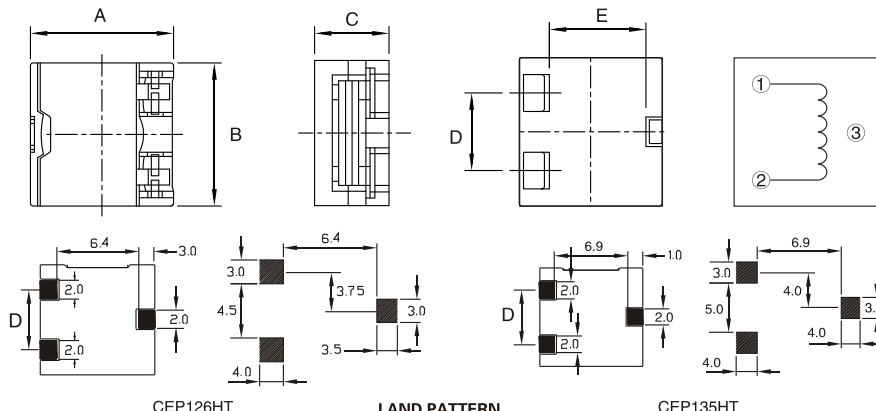
| Part Number    | Inductance (uH) | DCR (mΩ)Max | Isat (A) | Irms (A) |
|----------------|-----------------|-------------|----------|----------|
| CEP126HT-0R7N  | 0.7 ± 30%       | 2.3         | 30.0     | 30.0     |
| CEP126HT-0R9N  | 0.9 ± 30%       | 2.3         | 26.0     | 28.0     |
| CEP126HT-1R1N  | 1.1 ± 30%       | 3.2         | 25.0     | 26.0     |
| CEP126HT-1R5N  | 1.5 ± 30%       | 3.6         | 19.0     | 22.0     |
| CEP126HT-2R2N  | 2.2 ± 30%       | 6.0         | 15.0     | 17.0     |
| CEP126HT-2R7N  | 2.7 ± 30%       | 6.0         | 12.0     | 13.0     |
| CEP126HT-3R0N  | 3.0 ± 30%       | 6.0         | 13.0     | 15.0     |
| CEP126HT-3R6N  | 3.6 ± 30%       | 7.0         | 8.50     | 10.0     |
| CEP126HT-4R8N  | 4.8 ± 30%       | 7.0         | 7.50     | 9.00     |
| CEP135HT-0R56N | 0.56 ± 30%      | 1.26        | 38.0     | 35.0     |
| CEP135HT-0R68N | 0.68 ± 30%      | 1.80        | 29.0     | 30.0     |
| CEP135HT-1R2N  | 1.20 ± 30%      | 2.65        | 22.0     | 25.0     |
| CEP135HT-1R8M  | 1.80 ± 30%      | 3.45        | 18.0     | 20.0     |

| Part Number   | Inductance (uH) | DCR (mΩ)Max | Isat (A) | Irms (A) |
|---------------|-----------------|-------------|----------|----------|
| CEP135HT-2R8M | 2.80 ± 30%      | 7.95        | 15.0     | 13.0     |
| CEP159HT-1R2M | 1.20 ± 20%      | 2.0         | 19.0     | 16.0     |
| CEP159HT-1R4M | 1.40 ± 20%      | 2.0         | 18.0     | 15.0     |
| CEP159HT-1R8M | 1.80 ± 20%      | 3.0         | 18.0     | 14.0     |
| CEP159HT-2R0M | 2.00 ± 20%      | 3.0         | 16.0     | 13.0     |
| CEP159HT-2R5M | 2.50 ± 20%      | 3.4         | 14.5     | 12.0     |
| CEP159HT-2R8M | 2.80 ± 20%      | 3.4         | 14.0     | 12.0     |
| CEP159HT-3R0M | 3.00 ± 20%      | 4.3         | 13.0     | 10.0     |
| CEP159HT-3R6M | 3.60 ± 20%      | 4.3         | 12.0     | 10.0     |
| CEP159HT-3R9M | 3.90 ± 20%      | 6.5         | 11.5     | 9.0      |
| CEP159HT-4R5M | 4.50 ± 20%      | 6.5         | 10.5     | 8.0      |
| CEP159HT-4R8M | 4.80 ± 20%      | 7.2         | 10.0     | 7.0      |
| CEP159HT-5R6M | 5.60 ± 20%      | 7.2         | 9.0      | 6.0      |

Note:1. K= ± 10%,M= ± 20%,N= ± 30%

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

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- Soldering Methods: Wave,Reflow
- Operating Temperature:-40°C to +105°C
- Storage Temperature: -55°C to +125°C
- Terminal bending strength:24.5N Min
- Moisture resistance:  
 $\Delta L/L \leq \pm 10\%$   $\Delta Q/Q \leq \pm 25\%$



**Dimensions(mm)**

| Part Number | A           | B           | C          | D         | E         |
|-------------|-------------|-------------|------------|-----------|-----------|
| CEP126HT    | 12.5 ± 0.30 | 12.5 ± 0.30 | 5.7 ± 0.30 | 7.50 ref. | 6.40 ref. |
| CEP135HT    | 13.3 ± 0.30 | 13.1 ± 0.30 | 5.0 max    | 8.00 ref. | 6.90 ref. |
| CEP159HT    | 15.0 ± 0.40 | 15.0 ± 0.40 | 9.5 ± 0.50 | 10.0 ref. | 5.0 ref.  |

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