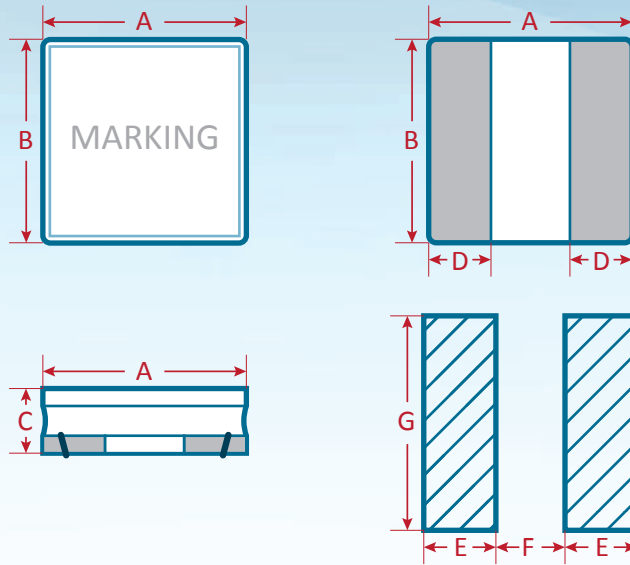




# HNT Series

## SMD Power Inductor

Shape and Dimensions(mm):



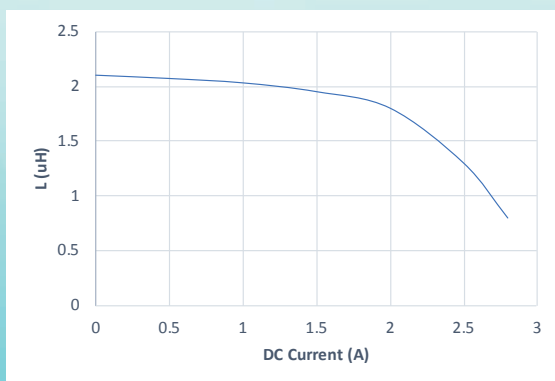
| Item    | A       | B       | C        | D        | E        | F        | G        |
|---------|---------|---------|----------|----------|----------|----------|----------|
| HNT3012 | 3.0±0.2 | 3.0±0.2 | 1.2 Max. | 1.0 Typ. | 1.1 Typ. | 1.0 Typ. | 3.2 Typ. |
| HNT3015 | 3.0±0.2 | 3.0±0.2 | 1.5 Max. | 1.0 Typ. | 1.1 Typ. | 1.0 Typ. | 3.2 Typ. |

### HNT3012

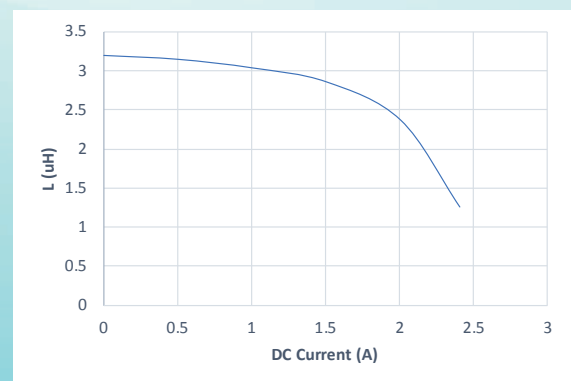


| Part No.     | Inductance (uH) | DCR(mΩ) ±30% | Isat(A) |      | Irms(A) |      | Tolerance (±%) |
|--------------|-----------------|--------------|---------|------|---------|------|----------------|
|              |                 |              | Typ.    | Max. | Typ.    | Max. |                |
| HNT3012MT2R2 | 2.2             | 92           | 2.1     | 1.89 | 2.0     | 1.8  | 20             |
| HNT3012MT3R3 | 3.3             | 130          | 1.84    | 1.65 | 1.8     | 1.62 | 20             |
| HNT3012MT4R7 | 4.7             | 180          | 1.56    | 1.4  | 1.52    | 1.36 | 20             |
| HNT3012MT6R8 | 6.8             | 250          | 1.32    | 1.18 | 1.3     | 1.17 | 20             |
| HNT3012MT100 | 10              | 420          | 1.06    | 0.95 | 1.0     | 0.9  | 20             |
| HNT3012MT150 | 15              | 560          | 0.82    | 0.73 | 0.8     | 0.72 | 20             |
| HNT3012MT220 | 22              | 860          | 0.64    | 0.57 | 0.62    | 0.55 | 20             |

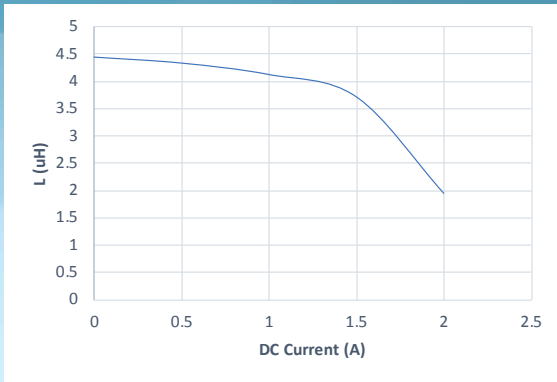
### HNT3012MT2R2



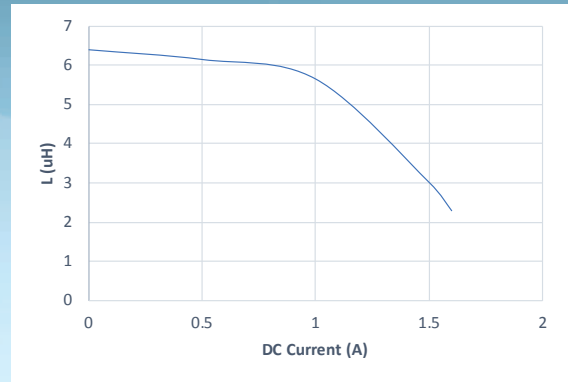
### HNT3012MT3R3



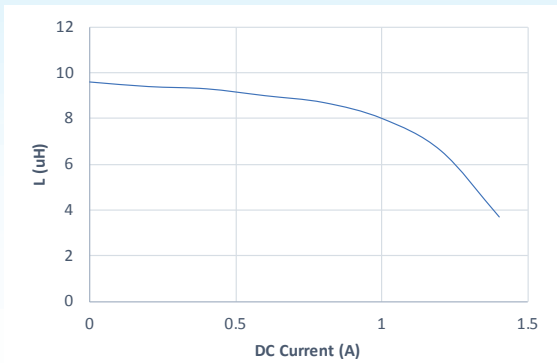
HNT3012MT4R7



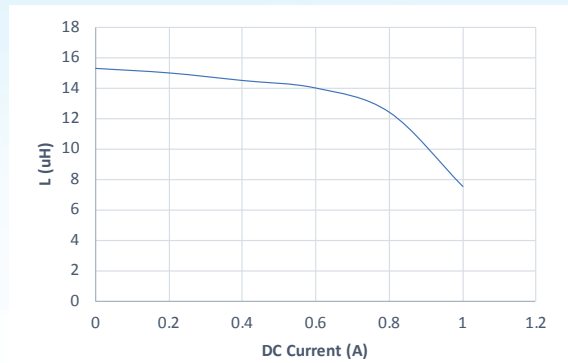
HNT3012MT6R8



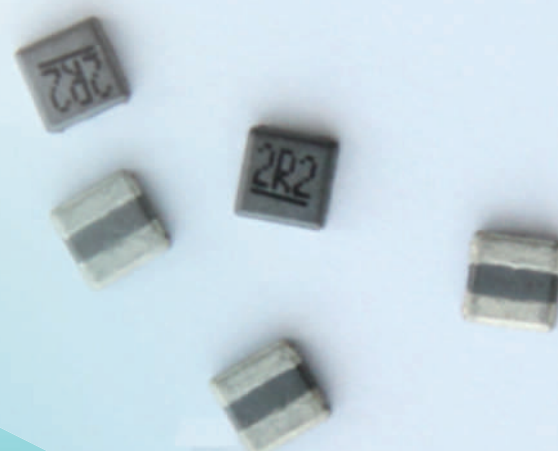
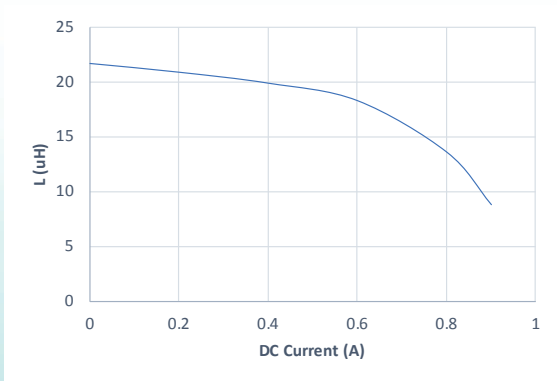
HNT3012MT100



HNT3012MT150



HNT3012MT220



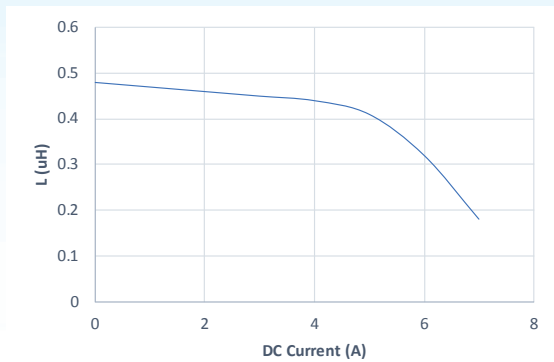
HNT3012

HNT3015

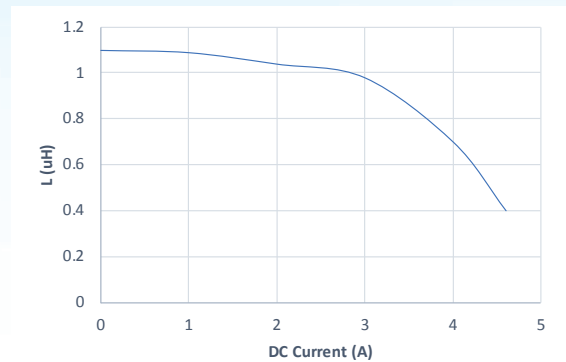


| Part No.     | Inductance<br>( $\mu$ H) | DCR( $m\Omega$ )<br>$\pm 30\%$ | Isat(A) |      | Irms(A) |      | Tolerance<br>( $\pm\%$ ) |
|--------------|--------------------------|--------------------------------|---------|------|---------|------|--------------------------|
|              |                          |                                | Typ.    | Max. | Typ.    | Max. |                          |
| HNT3015NTR47 | 0.47                     | 36                             | 4.7     | 4.23 | 4.0     | 3.6  | 30                       |
| HNT3015MT1R0 | 1.0                      | 54                             | 3.4     | 3.06 | 3.0     | 2.7  | 20                       |
| HNT3015MT1R5 | 1.5                      | 63                             | 3.0     | 2.7  | 2.6     | 2.34 | 20                       |
| HNT3015MT2R2 | 2.2                      | 90                             | 2.3     | 2.07 | 2.0     | 1.8  | 20                       |
| HNT3015MT3R3 | 3.3                      | 125                            | 1.9     | 1.71 | 1.8     | 1.62 | 20                       |
| HNT3015MT4R7 | 4.7                      | 170                            | 1.58    | 1.42 | 1.52    | 1.36 | 20                       |
| HNT3015MT6R8 | 6.8                      | 235                            | 1.34    | 1.2  | 1.3     | 1.17 | 20                       |
| HNT3015MT100 | 10                       | 360                            | 1.06    | 0.95 | 1.0     | 0.9  | 20                       |
| HNT3015MT150 | 15                       | 550                            | 0.9     | 0.81 | 0.8     | 0.72 | 20                       |
| HNT3015MT220 | 22                       | 770                            | 0.76    | 0.68 | 0.65    | 0.58 | 20                       |
| HNT3015MT330 | 33                       | 930                            | 0.65    | 0.58 | 0.6     | 0.54 | 20                       |

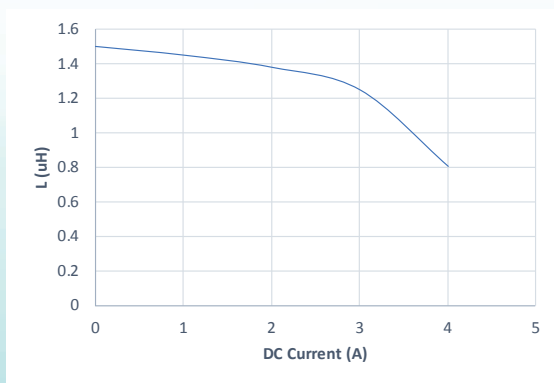
HNT3015NTR47



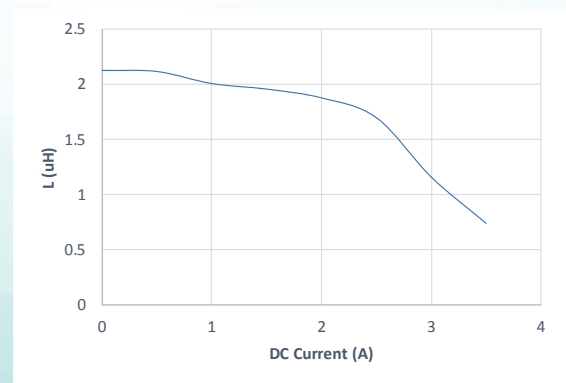
HNT3015MT1R0



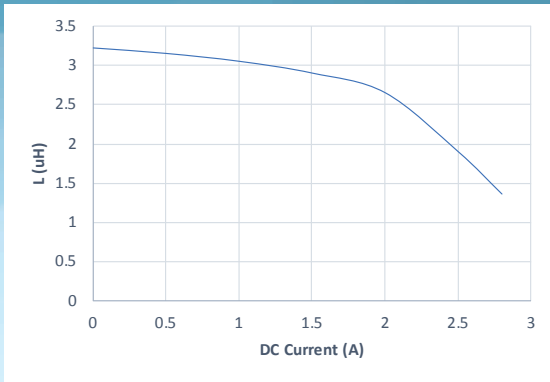
HNT3015MT1R5



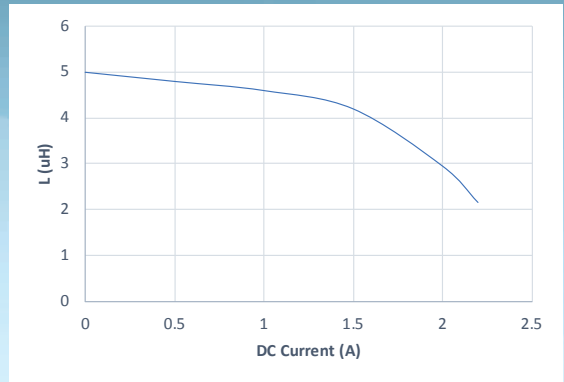
HNT3015MT2R2



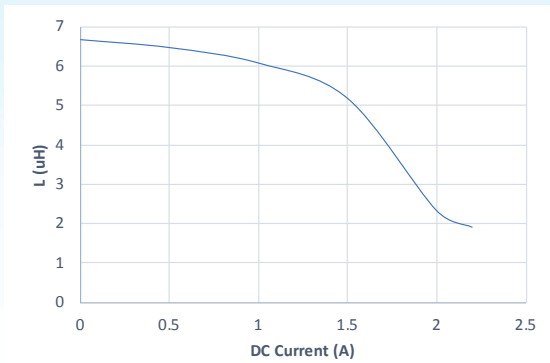
HNT3015MT3R3



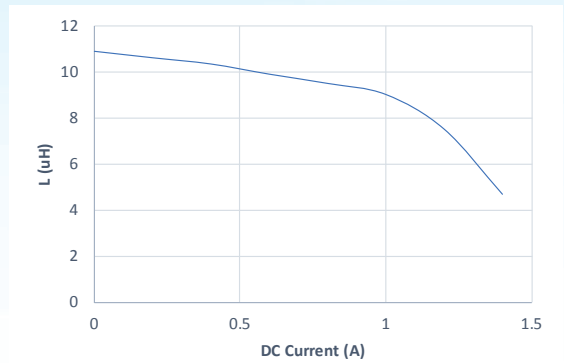
HNT3015MT4R7



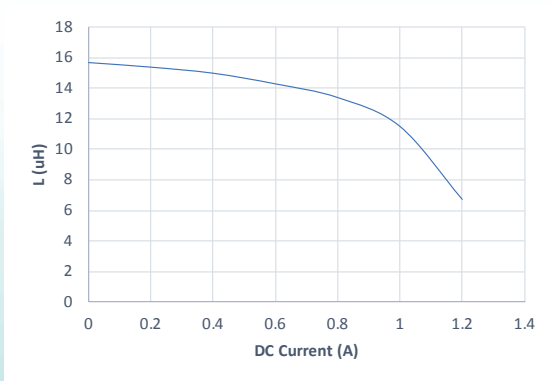
HNT3015MT6R8



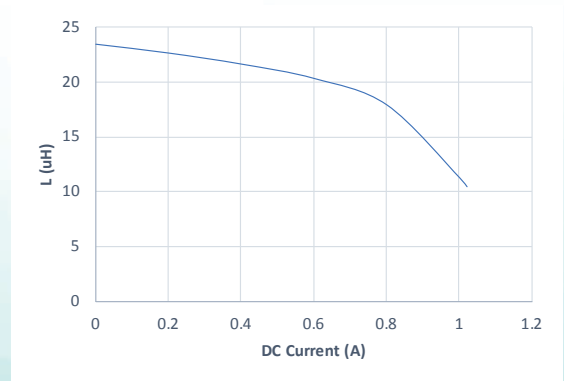
HNT3015MT100



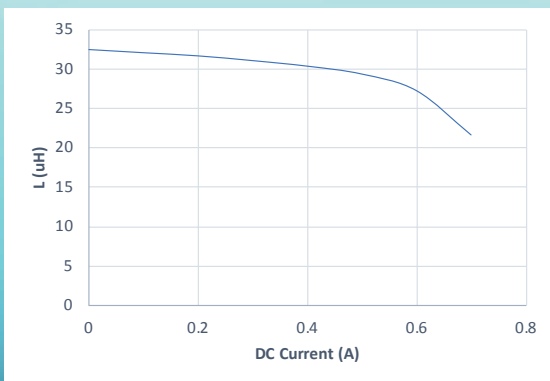
HNT3015MT150



HNT3015MT220



HNT3015MT330



## Ordering information

### HNT - 3012 - M - T - 2R2

(1) (2) (3) (4) (5)

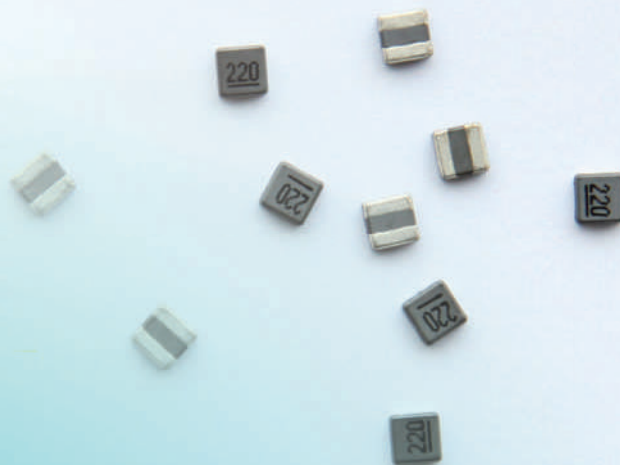
- ( 1 ) Type : SMD Power Inductor
- ( 2 ) Size : 3012 is size
- ( 3 ) Tolerance : M=20%
- ( 4 ) Packaging style : Taping Reel
- ( 5 ) Inductance : R47 for 0.47uH, 1R0 for 1.0uH, 100 for 10uH...

## Characteristics

- 1. All test data is referenced to 25 °C ambient.
- 2. Isat: DC current(100KHz/1V) at which the inductance drops approximate (TYP 35% 、 MAX 30%) from its value without current.
- 3. Irms :DC current(100KHz/1V) that will cause an approximate  $\Delta T$  of 40 ° C(reference ambient temperature is 25 °C).
- 4. absolute maximum voltage: DC 25V.
- 5. Operating temperature:-40~+125°C

## Test equipment

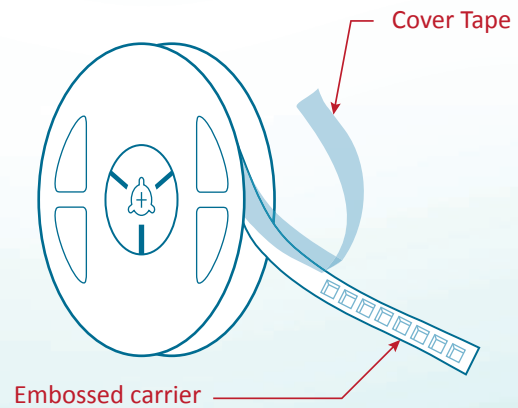
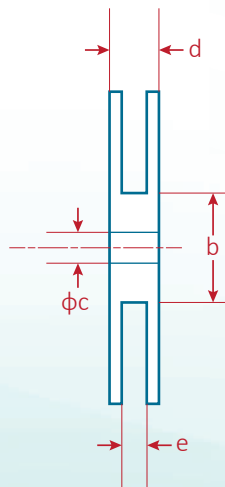
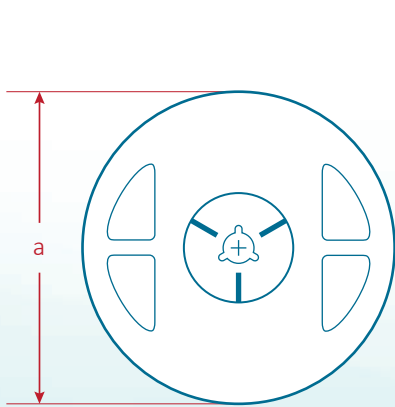
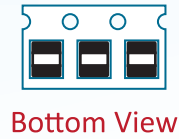
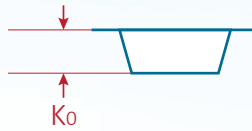
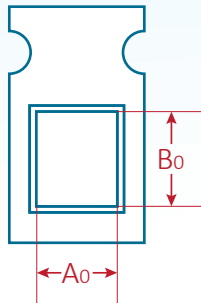
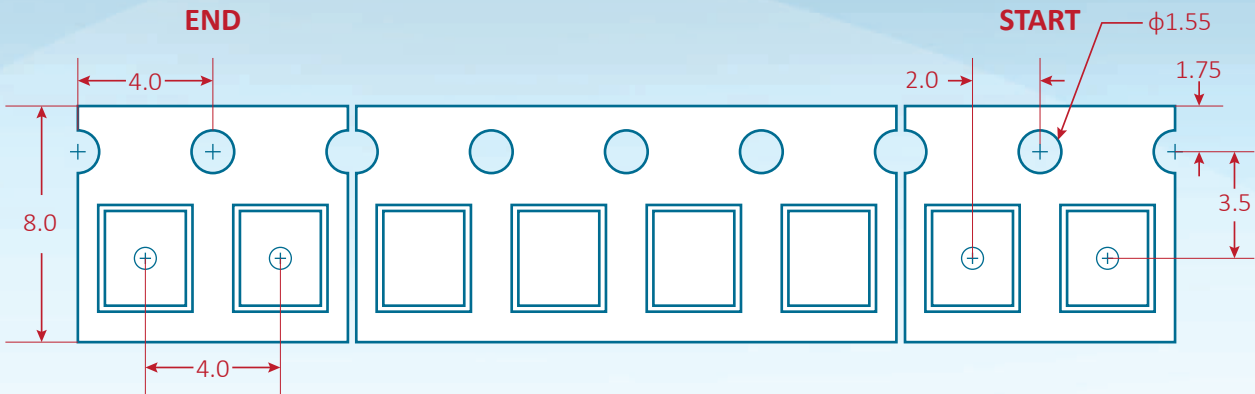
- L : Agilent/ HP4285A, 1MHz /0.1V
- DCR : Digital Milliohm Meter Chroma 16502, or equivalent
- Isat & Irms : CH1062+CH1310, 100kHz/ 1V



HNT3015

# Packing

Dimensions in mm



| Item      | A <sub>0</sub> | B <sub>0</sub> | K <sub>0</sub> | a   | b  | φ <sub>c</sub> | d    | e   |
|-----------|----------------|----------------|----------------|-----|----|----------------|------|-----|
| HNT3012   | 3.2            | 3.2            | 1.4            | 180 | 60 | 13             | 14.4 | 8.4 |
| HNT3015   | 3.15           | 3.15           | 1.6            | 180 | 60 | 13             | 14.4 | 8.4 |
| Reel      |                |                |                |     |    |                |      |     |
| Q'ty(Pcs) |                |                |                |     |    |                |      |     |
| 2,000     |                |                |                |     |    |                |      |     |