



SMD Power Inductors -KUP1005 Series

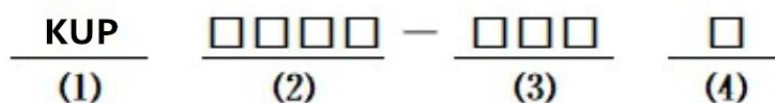
■ Features

- High current Type.
- Ferrite bobbin core and compact size.
- Low core loss for high frequency power application.
- Large terminal surface for good PCB bonding.
- Operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$.

■ Applications

- Portable communication equipment.
- Notebook PC, digital camera, LCD television set.
- Power supply for VTR, OA equipment.
- DC/DC converters.

■ Product Identification



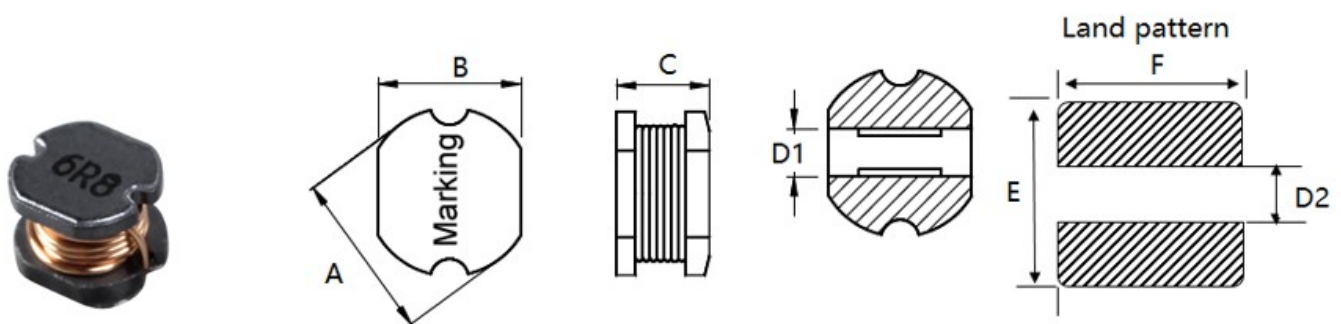
(1) : Type

(2) : Dimensions

(3) : Inductance value

(4): Inductance Tolerance: N=±30%, M=±20%, L=±15%, K=±10%

■ Shapes and Dimensions (Unit: mm)



| TYPE | A | B | C | D1 Ref. | D2 Ref. | E Ref. | F Ref. |
|---------|----------|---------|---------|---------|---------|--------|--------|
| KUP1005 | 10.0±0.3 | 9.0±0.3 | 5.4±0.3 | 2.9 | 2.5 | 10.0 | 9.5 |



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■ KUP1005 Series

| Part Number | Inductance (μ H) | L Test Frequency (KHz) | Max.DC Resistance (Ω) | Max.Rated Current (A) |
|--------------|--------------------------|---------------------------|-----------------------------------|--------------------------|
| KUP1005-1R0□ | 1.00 | 100 | 0.008 | 10.50 |
| KUP1005-1R5□ | 1.50 | 100 | 0.010 | 9.50 |
| KUP1005-2R2□ | 2.20 | 100 | 0.013 | 8.50 |
| KUP1005-3R3□ | 3.30 | 100 | 0.030 | 5.84 |
| KUP1005-4R7□ | 4.70 | 100 | 0.035 | 4.50 |
| KUP1005-5R6□ | 5.60 | 100 | 0.040 | 3.88 |
| KUP1005-6R8□ | 6.80 | 100 | 0.050 | 3.64 |
| KUP1005-8R2□ | 8.20 | 100 | 0.050 | 3.50 |
| KUP1005-100□ | 10.0 | 100 | 0.060 | 2.60 |
| KUP1005-120□ | 12.0 | 100 | 0.070 | 2.45 |
| KUP1005-150□ | 15.0 | 100 | 0.080 | 2.27 |
| KUP1005-180□ | 18.0 | 100 | 0.090 | 2.15 |
| KUP1005-220□ | 22.0 | 100 | 0.100 | 1.95 |
| KUP1005-270□ | 27.0 | 100 | 0.110 | 1.76 |
| KUP1005-330□ | 33.0 | 100 | 0.120 | 3.00 |
| KUP1005-390□ | 39.0 | 100 | 0.140 | 1.37 |
| KUP1005-470□ | 47.0 | 100 | 0.170 | 1.28 |
| KUP1005-560□ | 56.0 | 100 | 0.190 | 1.17 |
| KUP1005-680□ | 68.0 | 100 | 0.220 | 1.11 |
| KUP1005-820□ | 82.0 | 100 | 0.250 | 1.00 |
| KUP1005-101□ | 100 | 100 | 0.350 | 0.97 |
| KUP1005-121□ | 120 | 100 | 0.400 | 0.89 |
| KUP1005-151□ | 150 | 100 | 0.470 | 0.78 |



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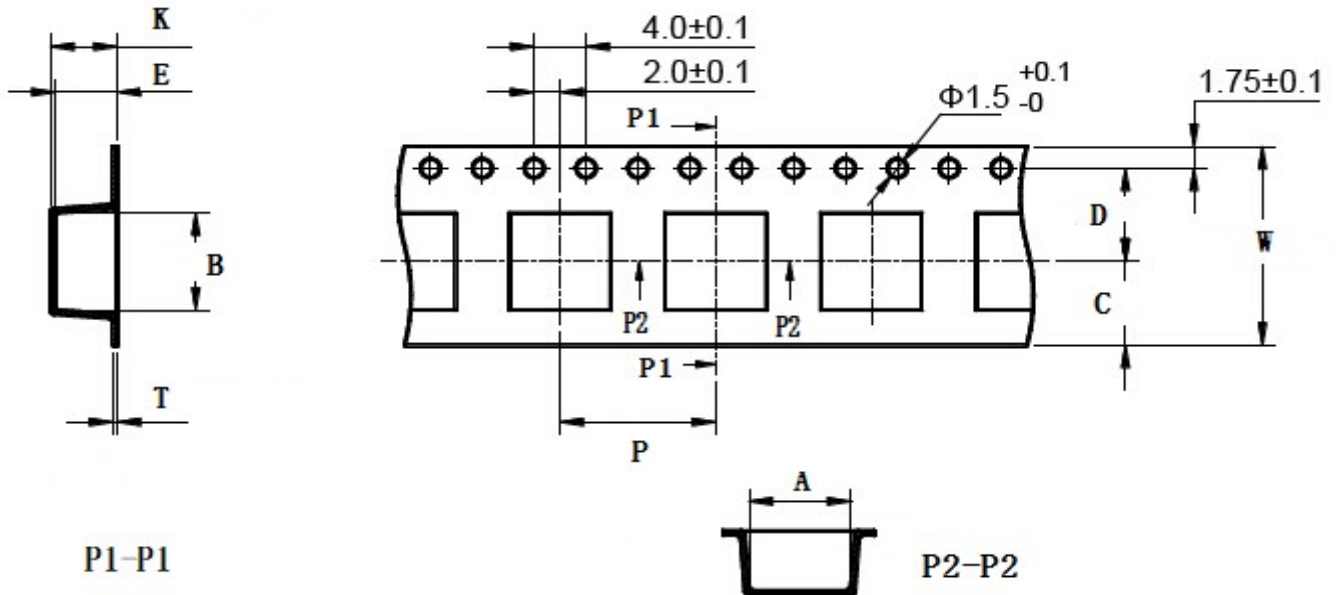
| Part Number | Inductance (μ H) | L Test Frequency (KHz) | Max.DC Resistance (Ω) | Max.Rated Current (A) |
|--------------|--------------------------|---------------------------|-----------------------------------|--------------------------|
| KUP1005-181□ | 180 | 100 | 0.630 | 0.72 |
| KUP1005-221□ | 220 | 100 | 0.730 | 0.66 |
| KUP1005-271□ | 270 | 100 | 0.970 | 0.57 |
| KUP1005-331□ | 330 | 100 | 1.150 | 0.52 |
| KUP1005-391□ | 390 | 100 | 1.300 | 0.48 |
| KUP1005-471□ | 470 | 100 | 1.480 | 0.42 |
| KUP1005-561□ | 560 | 100 | 1.900 | 0.33 |
| KUP1005-681□ | 680 | 100 | 2.250 | 0.28 |
| KUP1005-821□ | 820 | 100 | 2.550 | 0.24 |
| KUP1005-102□ | 1000 | 100 | 2.700 | 0.20 |
| KUP1005-222□ | 2200 | 100 | 5.220 | 0.17 |
| KUP1005-472□ | 4700 | 100 | 10.400 | 0.15 |

- ※ The saturation current value is the DC current value having inductance decrease down to 30%.(at 20°C)
- ※ The temperature rise current value is the DC current value having temperature increase up to 40°C. (at 20°C)
- ※ The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.



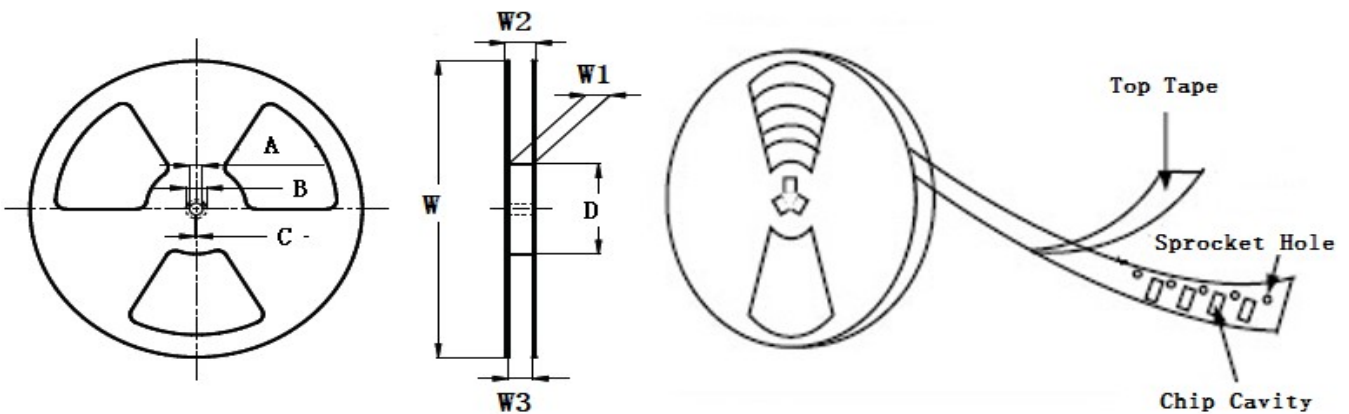
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Taping Dimensions(Unit:mm)



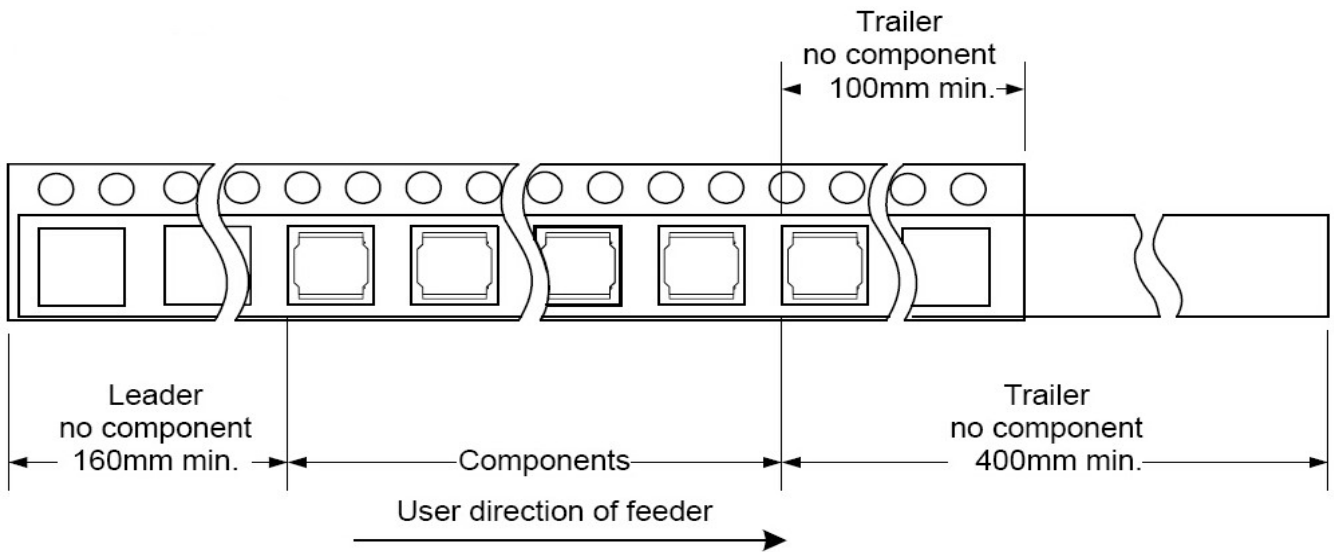
| TYPE | W | A | B | C | D | E | P | K Ref | T | MPQ |
|---------|--------|----------|-----------|-------|----------|----------|----------|-------|-----------|------|
| KUP1005 | 24±0.3 | 9.20±0.1 | 10.20±0.1 | 10.75 | 11.5±0.1 | 5.60±0.1 | 16.0±0.1 | 5.80 | 0.40±0.05 | 1000 |

Reel Dimensions(Unit:mm)



| TYPE | W | W1 | W2 | W3 | A | B | C | D |
|---------|---------|-----------|---------|----------|-----------|-----------|----------|---------|
| KUP1005 | 330±2.0 | 24.4±1.50 | 30.4MAX | 23.9 Min | 13.0±0.50 | 21.0±0.80 | 2.0±0.50 | 100 Min |

Direction of rolling



Cover tape peel off condition



Cover tape peel force shall be 0.1N to 1.3N.

Reference peel speed 300 ± 10 mm/min.