

■ Features

- Ultra low profile.
- Magnetic shielded for low radiation.
- Bobbin ferrite core and compact size.
- Low core loss for high frequency power application.
- Large terminal surface for good PCB bonding.
- Operating temperature:-40°C ~ +125°C.

■ Applications

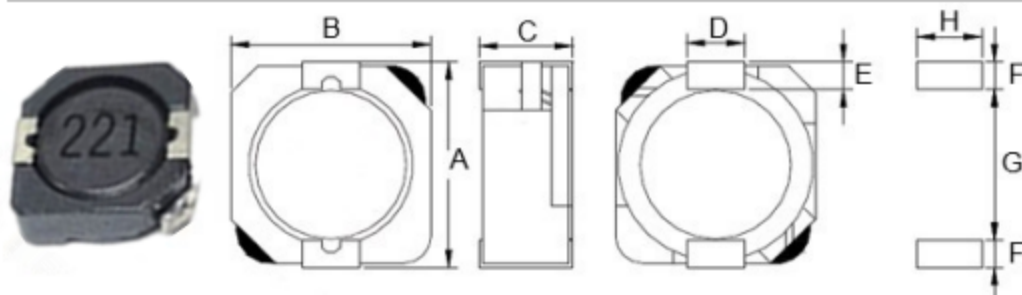
- Portable communication equipment.
- Notebook PC,digital camera,LCD television set.
- Power supply for VTR,OA equipment.
- DC/DC converters.

■ Product Identification

$\frac{\text{XRRH}}{(1)}$ $\frac{\square\square\square}{(2)}$ $-\frac{\square\square\square}{(3)}$ $\frac{M}{(4)}$

- (1) : Type
- (2) : Dimensions
- (3) : Inductance value
- (4) : Inductance Tolerance; N=±30%,M=±20%, K=±10%

■ Shapes and Dimensions (Unit: mm)



| TYPE | A | B | C Max | D | E | F Ref. | G Ref. | H Ref. |
|----------|----------|----------|-------|-----|-----|--------|--------|--------|
| XRRH105R | 10.1±0.3 | 10.1±0.3 | 5.0 | 3.0 | 1.2 | 1.6 | 7.3 | 3.2 |

XRRH105R Series

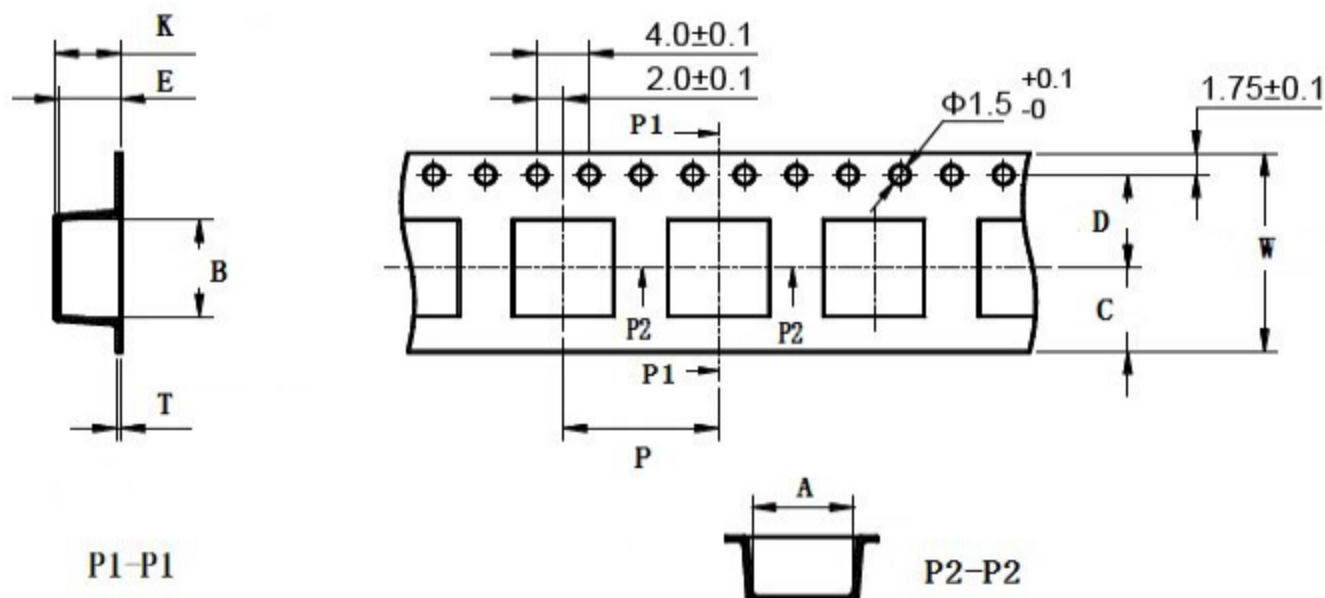
| Part Number | Inductance (uH) | Test Freq. (KHz) | DCR MAX. (Ω) | Saturation Current (A) | Heat Rating Current (A) |
|---------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|
| XRRH105R-R80M | 0.80 | 100 | 0.005 | 9.50 | 13.50 |
| XRRH105R-1R5M | 1.50 | 100 | 0.006 | 8.30 | 10.50 |
| XRRH105R-2R2M | 2.20 | 100 | 0.008 | 7.50 | 9.25 |
| XRRH105R-3R3M | 3.30 | 100 | 0.011 | 6.50 | 7.80 |
| XRRH105R-4R7M | 4.70 | 100 | 0.013 | 6.10 | 6.40 |
| XRRH105R-6R8M | 6.80 | 100 | 0.018 | 5.40 | 5.40 |
| XRRH105R-8R2M | 8.20 | 100 | 0.020 | 5.00 | 4.85 |
| XRRH105R-100M | 10.0 | 100 | 0.026 | 4.50 | 4.45 |
| XRRH105R-120M | 12.0 | 100 | 0.033 | 3.80 | 4.00 |
| XRRH105R-150M | 15.0 | 100 | 0.041 | 3.40 | 3.60 |
| XRRH105R-180M | 18.0 | 100 | 0.046 | 3.10 | 3.20 |
| XRRH105R-220M | 22.0 | 100 | 0.061 | 2.90 | 2.95 |
| XRRH105R-270M | 27.0 | 100 | 0.069 | 2.60 | 2.70 |
| XRRH105R-330M | 33.0 | 100 | 0.084 | 2.50 | 2.40 |
| XRRH105R-390M | 39.0 | 100 | 0.106 | 2.25 | 2.30 |
| XRRH105R-470M | 47.0 | 100 | 0.130 | 2.00 | 2.00 |
| XRRH105R-560M | 56.0 | 100 | 0.149 | 1.90 | 1.90 |
| XRRH105R-680M | 68.0 | 100 | 0.201 | 1.60 | 1.65 |
| XRRH105R-820M | 82.0 | 100 | 0.227 | 1.45 | 1.50 |
| XRRH105R-101M | 100 | 100 | 0.253 | 1.35 | 1.35 |
| XRRH105R-121M | 120 | 100 | 0.303 | 1.18 | 1.28 |
| XRRH105R-151M | 150 | 100 | 0.370 | 1.10 | 1.12 |
| XRRH105R-181M | 180 | 100 | 0.419 | 1.00 | 1.04 |
| XRRH105R-221M | 220 | 100 | 0.500 | 0.94 | 0.94 |
| XRRH105R-271M | 270 | 100 | 0.672 | 0.80 | 0.84 |

XRRH105R Series-Power Inductors

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR MAX. (Ω) | Saturation Current (A) | Heat Rating Current (A) |
|--------------------|---|-----------------------------|---|-----------------------------------|------------------------------------|
| XRRH105R-331M | 330 | 100 | 0.812 | 0.73 | 0.75 |
| XRRH105R-391M | 390 | 100 | 0.953 | 0.70 | 0.70 |
| XRRH105R-471M | 470 | 100 | 1.289 | 0.54 | 0.60 |
| XRRH105R-561M | 560 | 100 | 1.430 | 0.52 | 0.54 |
| XRRH105R-681M | 680 | 100 | 1.599 | 0.51 | 0.52 |
| XRRH105R-821M | 820 | 100 | 1.768 | 0.48 | 0.50 |
| XRRH105R-102M | 1000 | 100 | 1.989 | 0.42 | 0.48 |

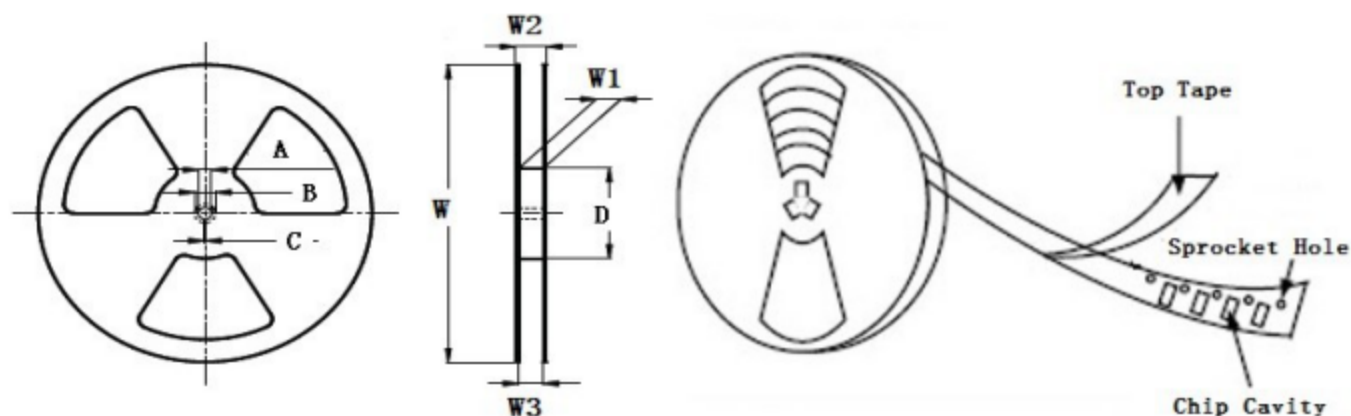
- ※ The saturation current value is the DC current value having inductance decrease down to 30%. (at 20°C)
- ※ The temperature rise current value is the DC current value having temperature increase up to 40°C. (at 20°C)
- ※ The rated current is the DC current value that satisfies both of current value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

■ Taping Dimensions(Unit:mm)

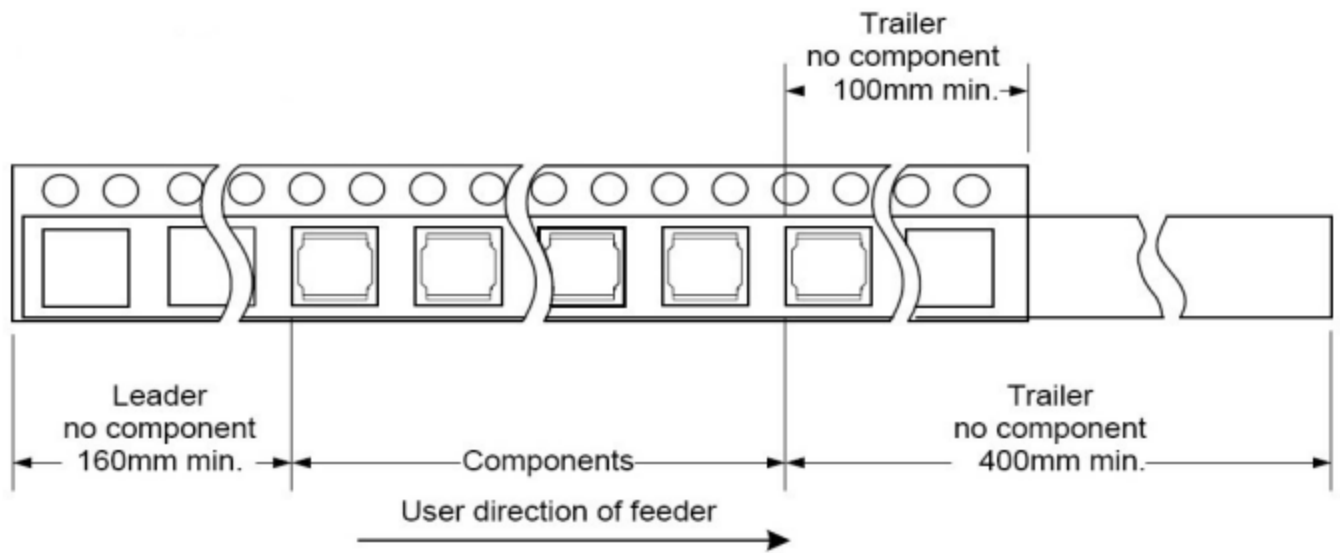
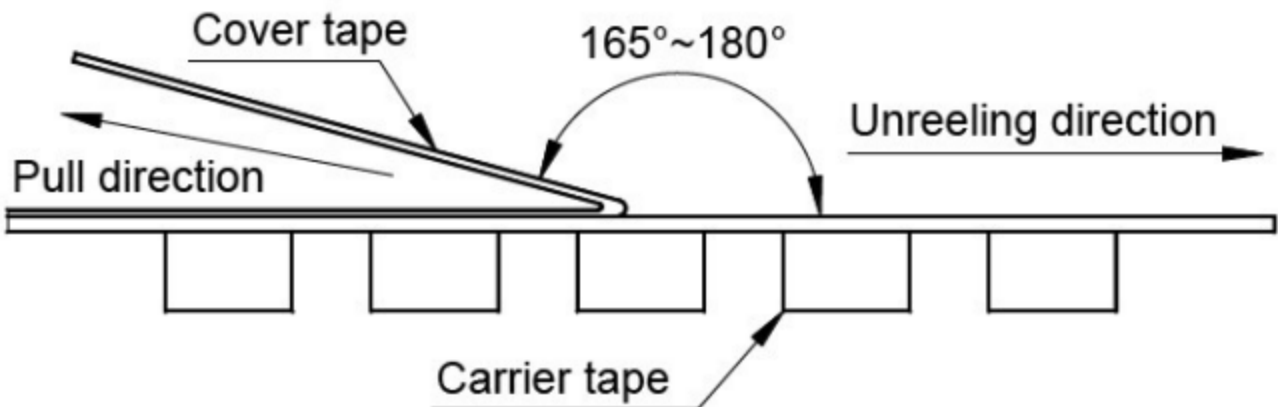


| TYPE | W | A | B | C | D | E | P | K Ref | T | MPQ |
|----------|--------|----------|----------|-------|----------|----------|--------|-------|-----------|-----|
| XRRH105R | 24±0.3 | 10.8±0.1 | 10.8±0.1 | 10.75 | 11.5±0.1 | 4.75±0.1 | 16±0.1 | 4.95 | 0.35±0.05 | 800 |

■ Reel Dimensions(Unit:mm)



| TYPE | W | W1 | W2 | W3 | A | B | C | D |
|----------|---------|-----------|---------|----------|-----------|-----------|----------|---------|
| XRRH105R | 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.