

# Chip Wire Wound Common Mode Choke

ACM-31



RoHS  
Compliant



3.2 x 1.6 x 1.8mm

## FEATURES:

- Small size with ferrite base
- Two line type wire wound
- High common-mode impedance at noise band and low differential-mode impedance at signal band
- Suitable for high-speed signal.

## APPLICATIONS:

- EMI and Noise Suppression
- USB Line Filter for Personal Computers and Peripheral
- IEEE 1394 Line for Personal Computers, DVC, STB
- Low-Voltage Differential Signal (LVDS) for LCD panels

## STANDARD SPECIFICATIONS

|                                   |                                                   |
|-----------------------------------|---------------------------------------------------|
| Abrakon P/N:                      | ACM-31                                            |
| Operating Temperature & Humidity: | -40°C to +85°C                                    |
| Storage Temperature & Humidity:   | 22°C to 28°C, Humidity < 80%RH (In tape and reel) |

| Part Number | Z                 | DCR             | IDC | Rated Voltage | Withstanding Voltage | Insulation Resistance |
|-------------|-------------------|-----------------|-----|---------------|----------------------|-----------------------|
| Units       | $\Omega \pm 20\%$ | $\Omega$ (max.) | mA  | Vdc           | Vdc                  | M $\Omega$ (min.)     |
| ACM-31-900  | 90                | 0.30            | 370 | 50            | 125                  | 10                    |
| ACM-31-121  | 120               | 0.30            | 370 | 50            | 125                  | 10                    |
| ACM-31-161  | 160               | 0.40            | 340 | 50            | 125                  | 10                    |
| ACM-31-261  | 260               | 0.50            | 310 | 50            | 125                  | 10                    |
| ACM-31-601  | 600               | 0.80            | 260 | 50            | 125                  | 10                    |
| ACM-31-102  | 1000              | 1.00            | 230 | 50            | 125                  | 10                    |
| ACM-31-222  | 2200              | 1.20            | 200 | 50            | 125                  | 10                    |

## Test Conditions

**Impedance:** LCR Meter HP 4291B, 100MHz

**DCR:** Micro-Ohm meter (GOM-801G)

**Withstand Voltage (VDC):** 125Vdc, 60 sec, 0.5mA

**Rated Voltage (VDC):** 50Vdc, 1 – 5 sec

**Insulation Resistance (I.R):** 1mA, 1 min

## PART IDENTIFICATION:

ACM-31 -  M -

### Impedance Code

Please refer to the  
table above

### Packaging

Blank: bulk  
T: Tape and Reel  
(2k pcs/reel)



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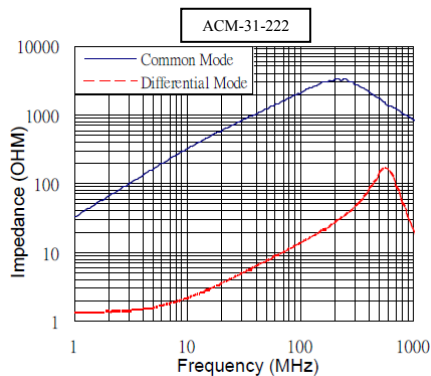
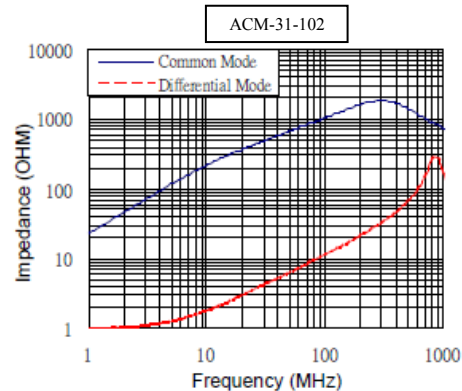
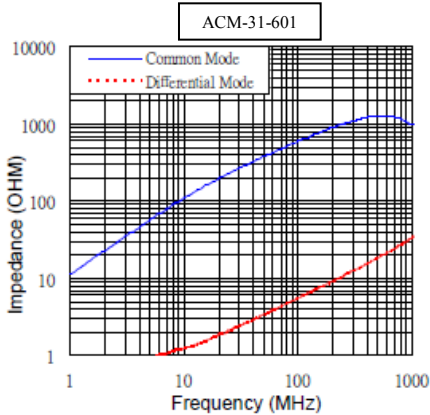
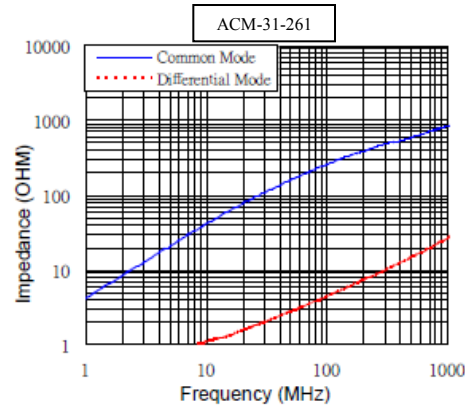
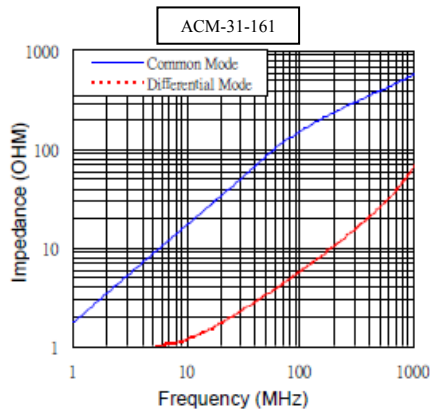
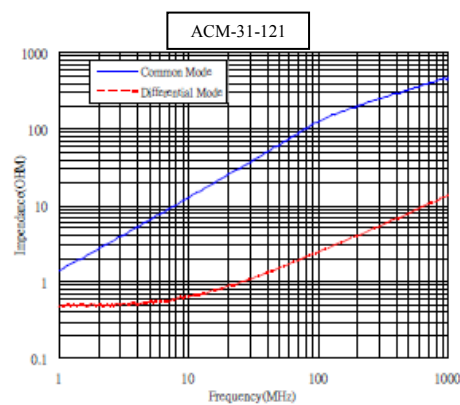
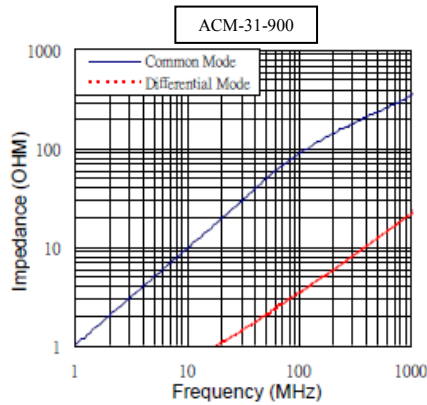


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3.2 x 1.6 x 1.8mm

## CHARACTERISTIC CURVE:



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Revised: 01.28.13

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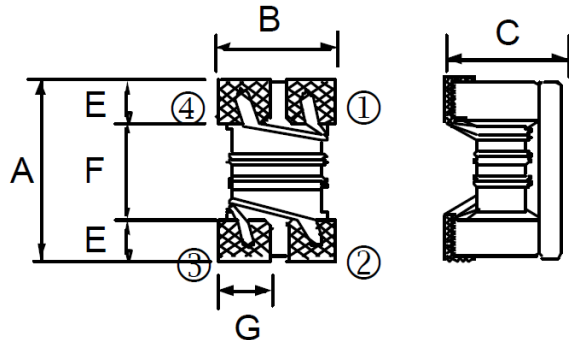


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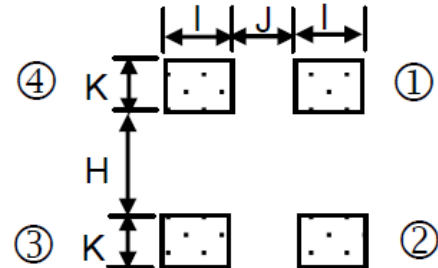


3.2 x 1.6 x 1.8mm

## OUTLINE DIMENSIONS:



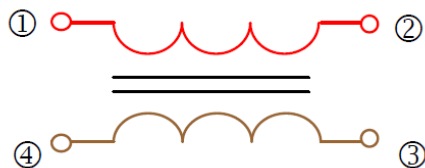
## Recommended Land Pattern



| A       | B       | C       | E    | F   | G   |
|---------|---------|---------|------|-----|-----|
| 3.0±0.2 | 1.6±0.2 | 1.8±0.2 | 0.60 | 2.0 | 0.6 |

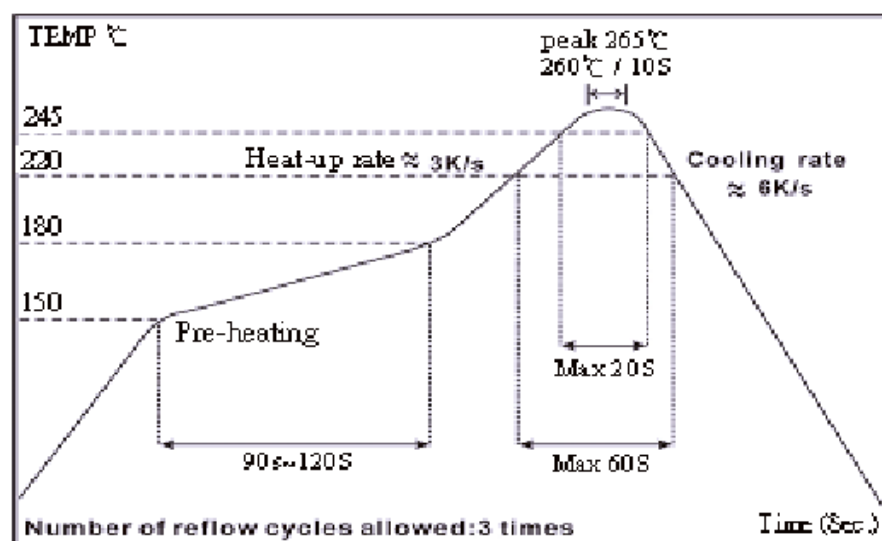
| H   | I   | J   | K    |
|-----|-----|-----|------|
| 1.6 | 0.6 | 0.4 | 1.05 |

## Schematic



Dimension: mm

## REFLOW PROFILE:



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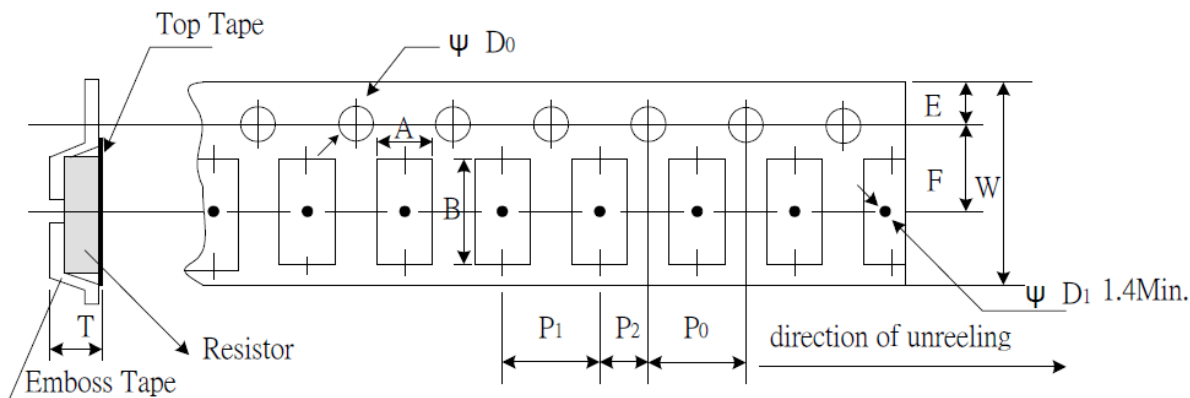


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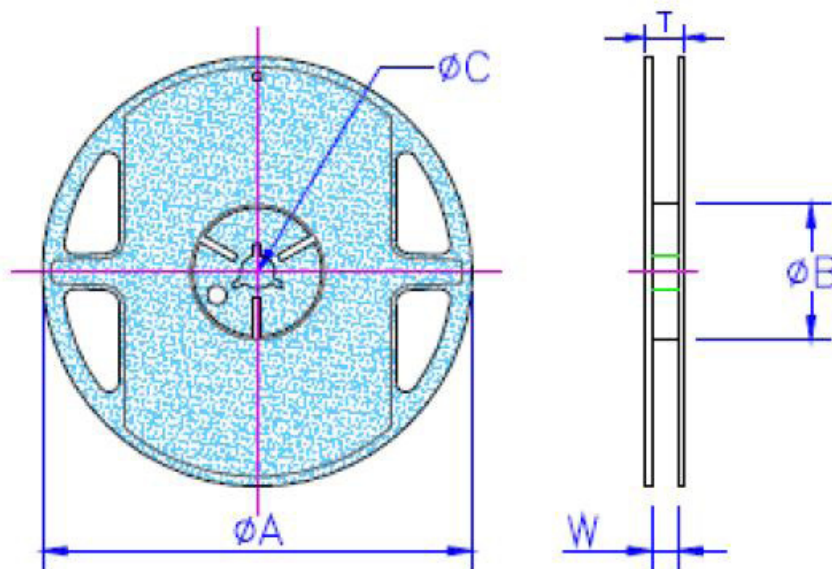


3.2 x 1.6 x 1.8mm

TAPE & REEL: 2000pcs/reel



| A         | B         | W        | E         | F        | P0        | P1        | P2        | ΦD0       | t         |
|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|
| 1.90±0.10 | 3.50±0.05 | 8.0±0.20 | 1.75±0.10 | 3.5±0.10 | 4.00±0.10 | 4.00±0.10 | 2.00±0.10 | 1.50±0.10 | 2.10±0.10 |



| ΦA      | ΦB     | ΦC     | W     | T        |
|---------|--------|--------|-------|----------|
| 178±2.0 | 60±0.5 | 13±0.3 | 9±0.3 | 11.4±1.0 |

Dimension: mm

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