

# Chip Wire Wound Common Mode Choke

ACM-21



RoHS  
Compliant



2.0 x 1.2 x 1.2mm

## 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-21                                            |
| 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-21-300  | 30                | 0.20            | 450 | 50            | 125                  | 10                    |
| ACM-21-670  | 67                | 0.25            | 400 | 50            | 125                  | 10                    |
| ACM-21-900  | 90                | 0.30            | 400 | 50            | 125                  | 10                    |
| ACM-21-121  | 120               | 0.30            | 370 | 50            | 125                  | 10                    |
| ACM-21-161  | 160               | 0.35            | 330 | 50            | 125                  | 10                    |
| ACM-21-181  | 180               | 0.35            | 330 | 50            | 125                  | 10                    |
| ACM-21-201  | 200               | 0.35            | 330 | 50            | 125                  | 10                    |
| ACM-21-221  | 220               | 0.35            | 330 | 50            | 125                  | 10                    |
| ACM-21-261  | 260               | 0.40            | 300 | 50            | 125                  | 10                    |
| ACM-21-361  | 360               | 0.40            | 280 | 50            | 125                  | 10                    |
| ACM-21-371  | 370               | 0.40            | 280 | 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-21 -  M -



### Impedance Code

Please refer to the table above

### Packaging

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



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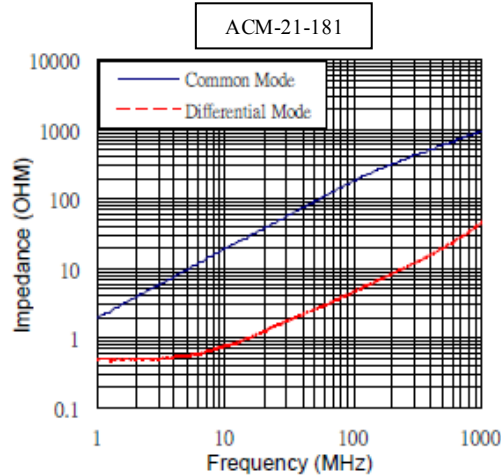
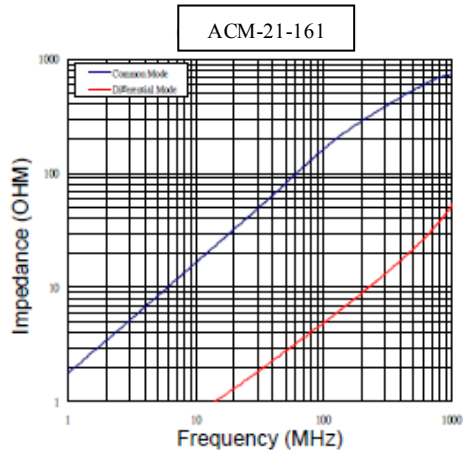
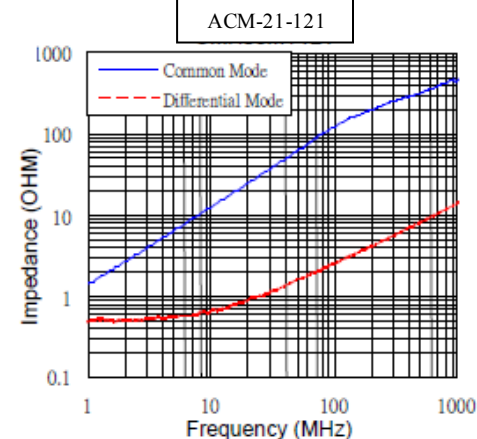
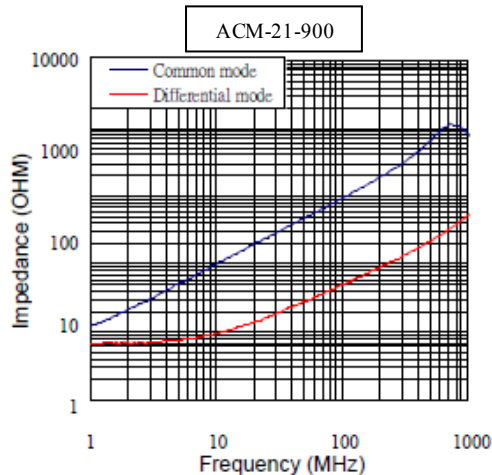
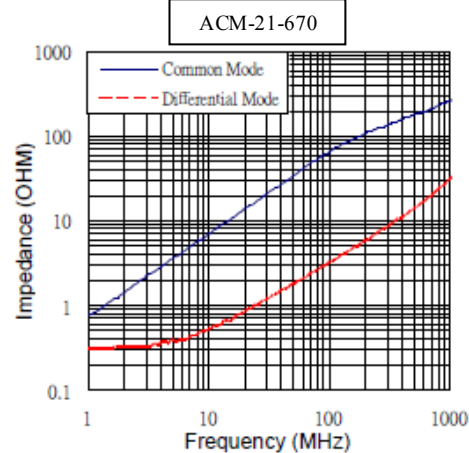
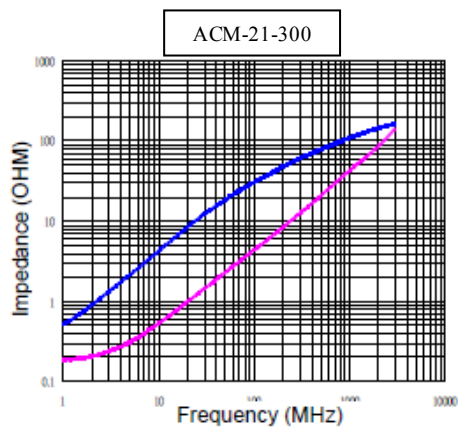


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## ELECTRICAL CHARACTERISTIC CURVE:



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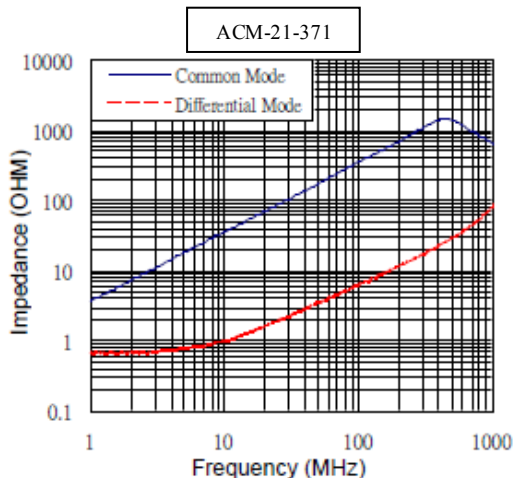
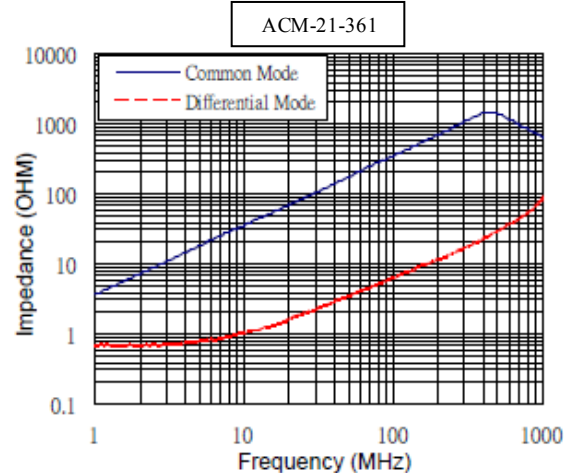
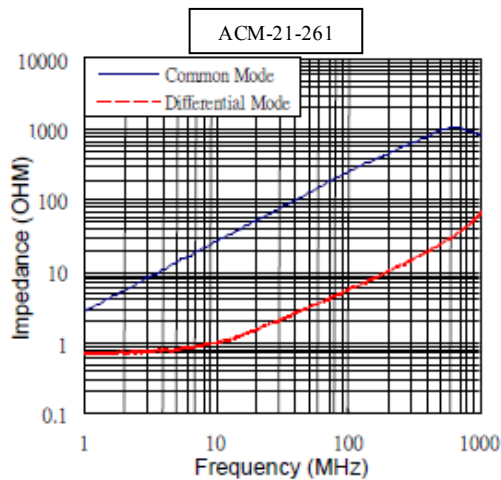
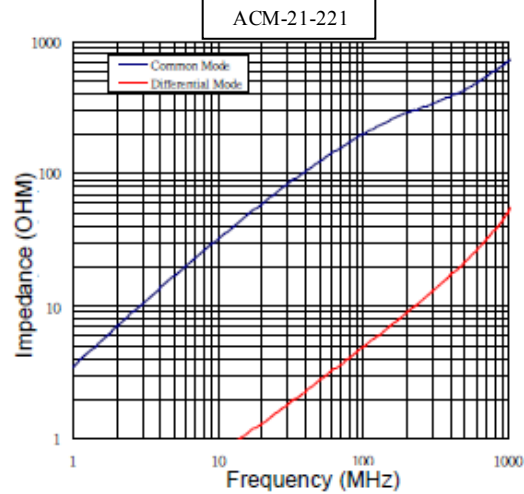
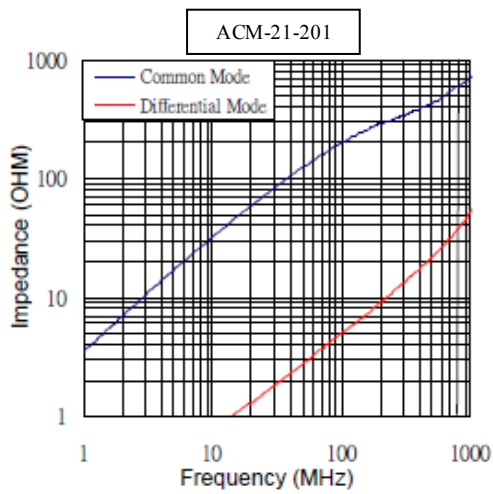


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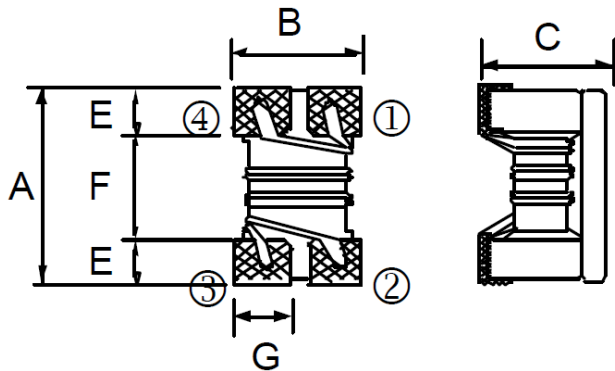


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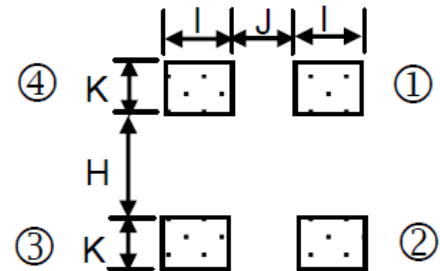
2.0 x 1.2 x 1.2mm

## OUTLINE DIMENSIONS:



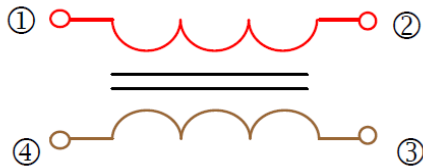
| A       | B       | C       | E    | F   | G   |
|---------|---------|---------|------|-----|-----|
| 2.0±0.2 | 1.2±0.2 | 1.2±0.2 | 0.45 | 1.2 | 0.4 |

## Recommended Land Pattern

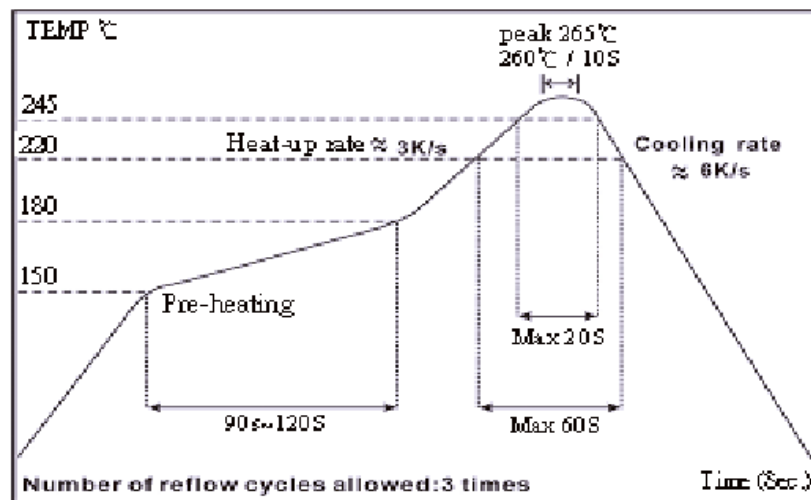


| H   | I   | J   | K    |
|-----|-----|-----|------|
| 0.8 | 0.4 | 0.4 | 0.90 |

## Schematic



## REFLOW PROFILE:



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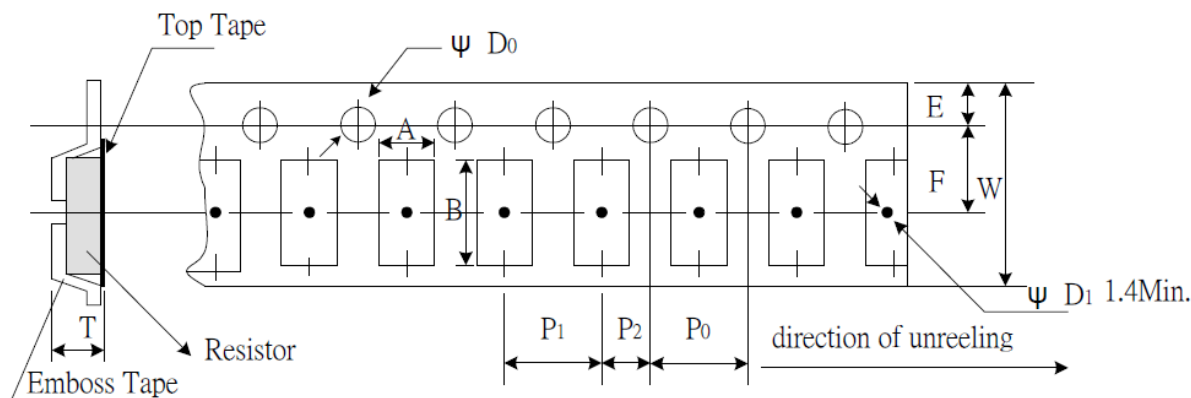


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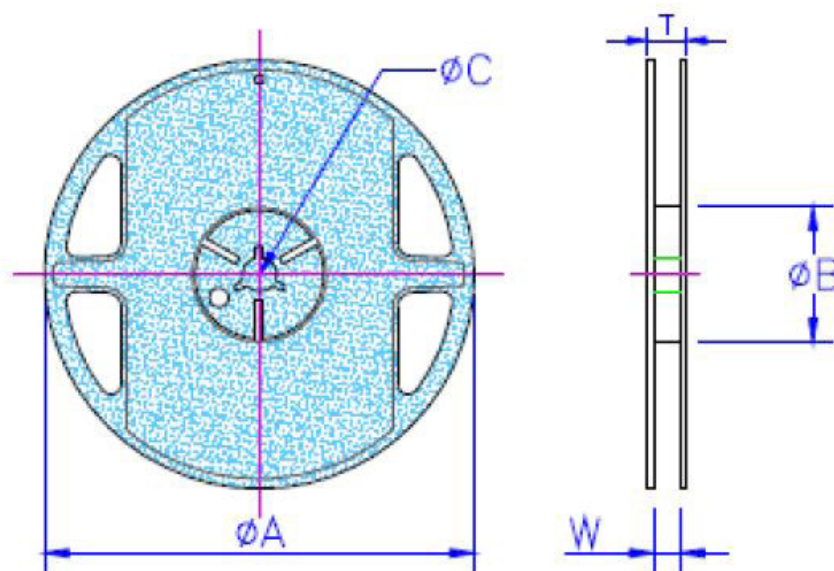


2.0 x 1.2 x 1.2mm

TAPE & REEL: 2000pcs/reel



| A         | B         | W        | E         | F        | P0        | P1        | P2        | ΦD0       | t         |
|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|
| 1.40±0.10 | 2.55±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 | 1.35±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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