



# CM0100Q0805AT COMMON MODE FILTER SPECIFICATION

Rev. A

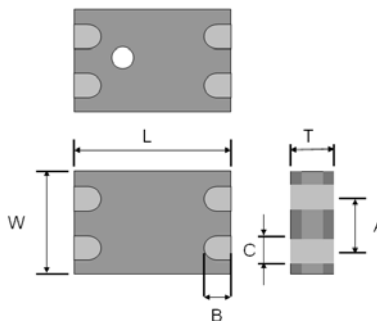
## PRODUCT FEATURES

1. Surface mount common mode filter with a small size of 2.0 X 1.2 X 1.0 mm, RoHS compliant.
2. Provide wide pass band and high attenuation for common mode noise.
3. Highly stable under temperature and humidity changes.

## RF CHARACTERISTICS

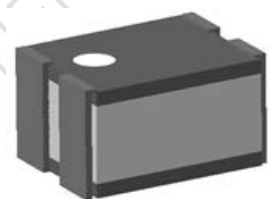
| P/N                                     | CM0100Q0805AT | Specification              |
|-----------------------------------------|---------------|----------------------------|
| Cut-off Frequency                       |               | 4 GHz (Typical)            |
| Common Mode Impedance                   |               | 90 Ohms $\pm$ 20% @ 100MHz |
| DC Resistance                           |               | 1.0 $\Omega$ max.          |
| Rated Current                           |               | 200 mA                     |
| Characteristic Impedance (Differential) |               | 100 $\Omega$ (Typical)     |
| Operating temperature range             |               | -40°C to +85°C             |

## PHYSICAL DIMENSIONS



| Symbol | Dimension (mm)  |
|--------|-----------------|
| L      | 2.00 $\pm$ 0.10 |
| W      | 1.25 $\pm$ 0.10 |
| T      | 1.00 $\pm$ 0.10 |
| A      | 0.68 $\pm$ 0.15 |
| B      | 0.35 $\pm$ 0.15 |
| C      | 0.35 $\pm$ 0.15 |

## TERMINAL CONFIGURATION



## PCB DESIGN/LAYOUT CONSIDERATION

| Figure                                          | Symbol | Dimension (mm)  |
|-------------------------------------------------|--------|-----------------|
|                                                 | L1     | 1.20 $\pm$ 0.10 |
|                                                 | L2     | 2.60 $\pm$ 0.05 |
|                                                 | L3     | 0.80 $\pm$ 0.05 |
|                                                 | L4     | 0.33 $\pm$ 0.05 |
| Design trace width to be 50 $\Omega$ impedance. |        |                 |



## Typical RF Performance



Frequency VS Impedance

