



# CM0100Q0504FT COMMON MODE FILTER SPECIFICATION

Rev. A

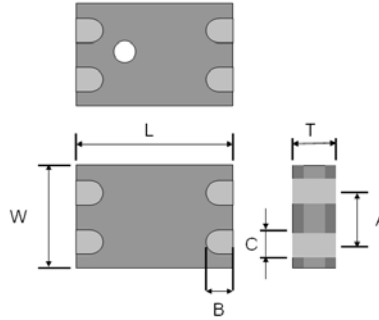
## PRODUCT FEATURES

1. Surface mount common mode filter with a small size of 1.25 X 1.00 X 0.80 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

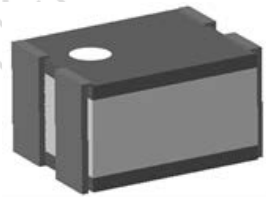
P/N	CM0100Q0504FT	Specification
Cut-off Frequency		3 GHz (Typical)
Common Mode Impedance		90 Ohms $\pm$ 20% @ 100MHz
DC Resistance		1.0 $\Omega$ max.
Rated Current		300 mA
Characteristic Impedance (Differential)		100 $\Omega$ (Typical)
Operating temperature range		-40°C to +85°C

## PHYSICAL DIMENSIONS



Symbol	Dimension (mm)
L	1.25 $\pm$ 0.10
W	1.00 $\pm$ 0.10
T	0.80 $\pm$ 0.10
A	0.55 $\pm$ 0.10
B	0.20 $\pm$ 0.15
C	0.30 $\pm$ 0.10

## TERMINAL CONFIGURATION



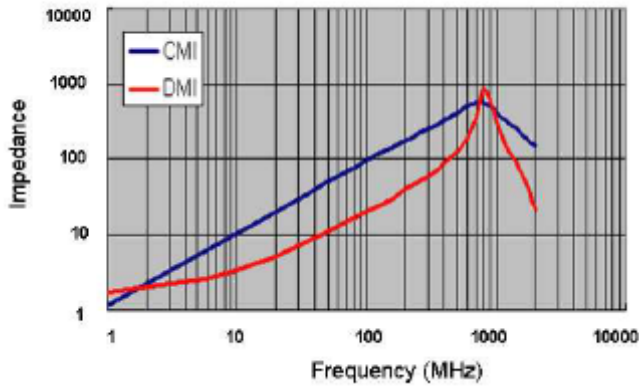
## PCB DESIGN/LAYOUT CONSIDERATION

Figure	Symbol	Dimension (mm)
	L1	1.75 $\pm$ 0.05
	L2	0.30 $\pm$ 0.10
	L3	0.75 $\pm$ 0.05
	L4	0.55 $\pm$ 0.05
Design trace width to be 50 $\Omega$ impedance.		

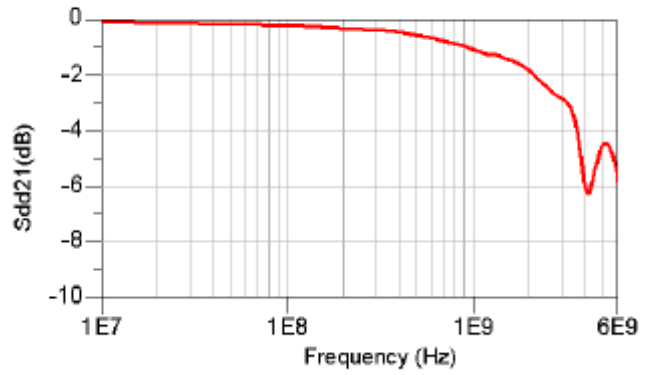


## Typical RF Performance

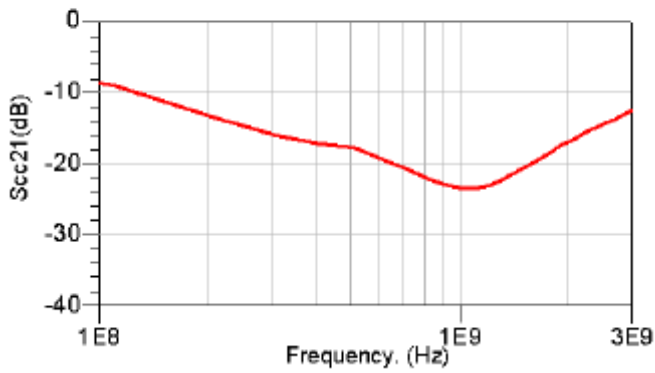
Impedance vs Frequency Characteristic:



Insertion Loss vs Frequency Characteristic:



Insertion Loss vs Frequency Characteristic:



Common mode to differential mode conversion characteristic

