

# Data Sheet

- ITEM : COMMON MODE FILTER  
- PART NO : ICMF214P181MFR

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## 1. Generals

- This specification covers the engineering requirements for the ICMF214P181M (Common Mode Filter)

## 2. Features

- Effective for suppressing common mode noise and almost no effect for high speed differential data line
- Ultra low profile (2.0 x 1.2 x 0.8mm)
- Ceramic multilayer type SMD component
- Non-polarized product
- It is a product conforming to RoHS directive.

## 3. Applications

- LVDS lines in notebook computers
- USB2.0, IEEE1394, DVI, HDMI lines in PDP, LCD TV, DVD Player, PC, Audio player, DSC
- MDDI, MIPI in mobile phone

## 4. Product specifications

### 4. 1 PART NUMBER CODE

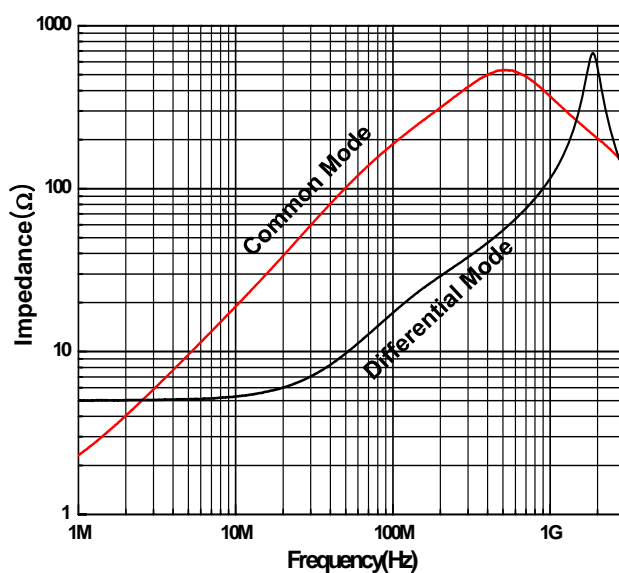
ICMF    21    4P    181    M    F    R  
 ①        ②        ③        ④        ⑤        ⑥        ⑦

- ① Series name of ICT's Common Mode Filter
- ② Dimensions, 2.0mm (L) x 1.20mm (W)
- ③ The number of lines, 4P= 4 lines
- ④ Common Mode Impedance (at 100MHz) 181= 180Ω
- ⑤ Tolerance of common mode impedance, M= ±25%
- ⑥ Type of electrode plating: F= Lead Free
- ⑦ Packing Type, R= Reel

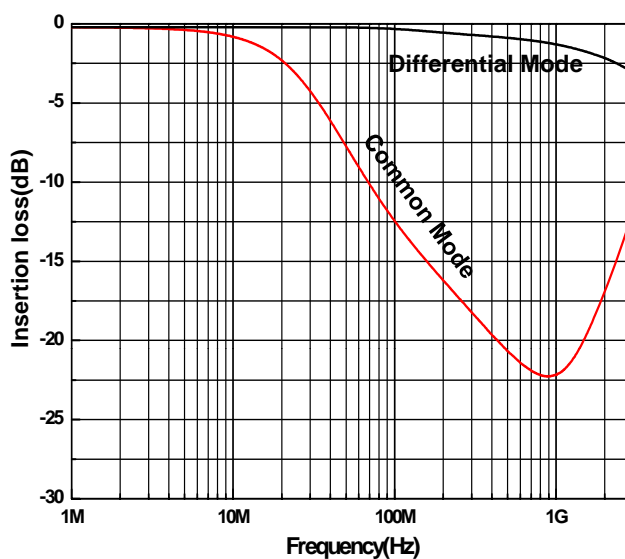
## 4. 2 Specification of electrical characteristics

Characteristics	Common Mode Impedance	Resistance	Insulation Resistance	Rated Current
symbol	$Z_{CM}$	$R_{DC}$	$IR_{CR}$	$I_R$
Units	$\Omega$	$\Omega$	$M\Omega$	mA
Test Condition	@100MHz	$25^{\circ}C \pm 2^{\circ}C$	10V	$25^{\circ}C \pm 2^{\circ}C$
Value	180( $\pm 25\%$ )	Max 4.0	Max 10	Max 100

### - Impedance Curves



### - Transmission characteristics (S-parameter)

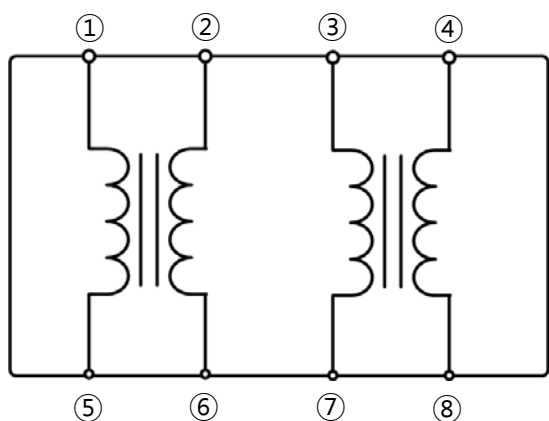


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### 4. 3 Operating Temperature

DESCRIPTION	REQUIREMENTS
Operating Temperature	-40℃ ~ + 85℃

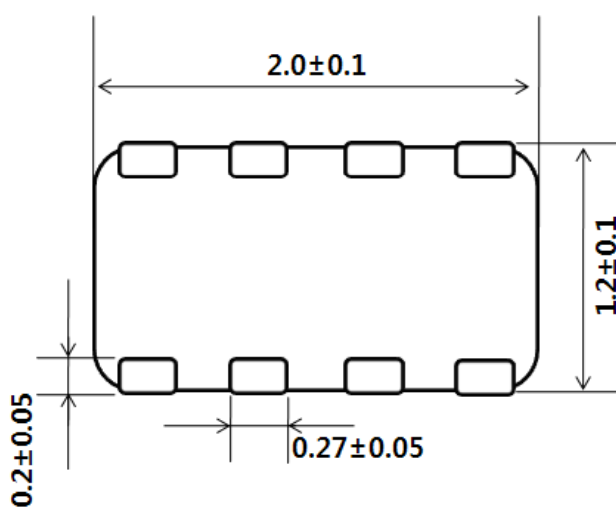
## 5. Equivalent Circuit



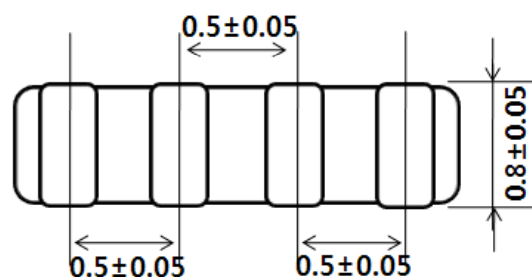
PIN NUMBER	DESCRIPTION
①~⑧	DATA LINE

## 6. Mechanical Property

### 6. 1 Appearance and Dimension



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Unit : mm