## EXTERNAL DIMENSIONS


(Unit: mm)


| TYPE | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YFD2012HT | $2.0 \pm 0.2$ | $1.2 \pm 0.2$ | $1.2 \pm 0.2$ | $0.2 \pm 0.1$ | 0.40 Typ. | 0.36 Typ. |


| Part <br> Number | $\mathrm{Z}(\Omega)$ Common Mode Impedance at 100 MHz | $\begin{gathered} \operatorname{Idc}(\mathbf{m A}) \\ (\text { Max. }) \end{gathered}$ | $\underset{\text { (Max.) }}{\operatorname{DCR}(\boldsymbol{\Omega})}$ | Rated Voltage Vdc (V)Typ. | Characteristic Resistance ( $\Omega$ ) | Insulation <br> Resistance <br> (M $\mathbf{M}$ )Min. | Cut-off Frequency (GHz)Typ. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YFD2012HT-300-1S | 30 | 300 | 0.20 | 20 | 100 | 10 | 6.0 |
| YFD2012HT-600-1S | 60 | 300 | 0.30 | 20 | 100 | 10 | 6.0 |
| YFD2012HT-900-1S | 90 | 300 | 0.30 | 20 | 100 | 10 | 6.0 |

## Features

■ These broadband common mode filters were developed for high-speed differential signal interfaces, such as DVI and HDMI ${ }^{\text {TM }}$.
■ The cutoff frequencies in differential mode for YFDxxxxD and YFDxxxxH are 3.5 GHz and 6.0 GHz respectively, so they do not interfere with high-speed differential signals.

- The characteristic impedance is approximated to $100 \Omega$, conforming to the TDR standard for HDMI ${ }^{\text {TM }}$.


## Applications

- For new HDMI ${ }^{\mathrm{TM}}$ interfaces used in digital video Used for radiation noise suppression for any electronic devices. devices: YFDxxxxH is suited for use on the transmission side (Source) of digital TVs, DVD recorders and liquid crystal projectors. YFDxxxxD is suited for use on the receiving side (Sink).
■ For digital video signal interfaces DVI (UXGA) used in PCs and other devices/High-speed differential signal interfaces for USB 2.0, IEEE1394 and Serial ATA.


## Schematic



## Test Mode



## Impedance vs. Frequency



