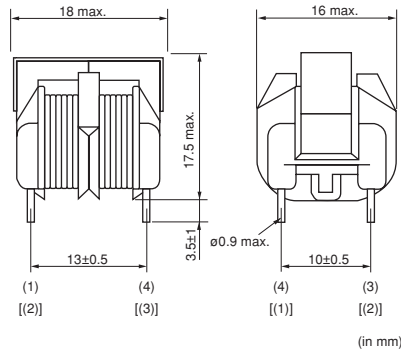


# AC Line Filters Hybrid Choke Coils

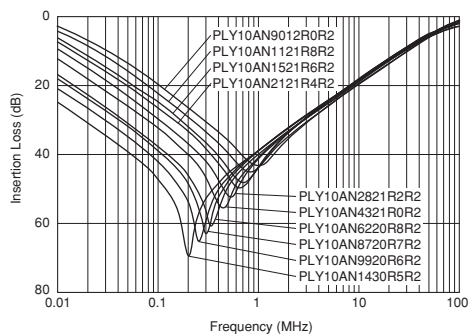
## PLY10 Series

### PLY10 Series Standard Winding Type

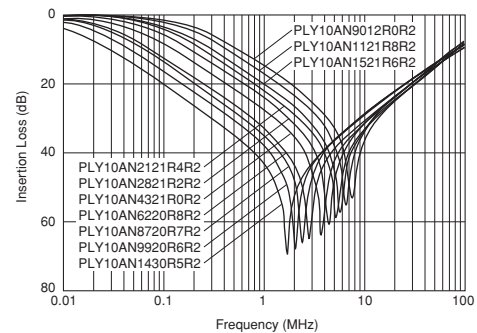
#### ■ Dimensions



#### ■ Common Mode Insertion Loss-Frequency Characteristics



#### ■ Differential Mode Insertion Loss-Frequency Characteristics



#### ■ Rated Value (□: packaging code)

| Part Number      | Common Mode Inductance (min.) | Normal Mode Inductance (min.) | Rated Current | Rated Voltage |
|------------------|-------------------------------|-------------------------------|---------------|---------------|
| PLY10AN9012R0R2□ | 0.9mH                         | 65μH                          | 2.0A          | 300Vac        |
| PLY10AN1121R8R2□ | 1.1mH                         | 90μH                          | 1.8A          | 300Vac        |
| PLY10AN1521R6R2□ | 1.5mH                         | 110μH                         | 1.6A          | 300Vac        |
| PLY10AN2121R4R2□ | 2.1mH                         | 150μH                         | 1.4A          | 300Vac        |
| PLY10AN2821R2R2□ | 2.8mH                         | 190μH                         | 1.2A          | 300Vac        |
| PLY10AN4321R0R2□ | 4.3mH                         | 300μH                         | 1.0A          | 300Vac        |
| PLY10AN6220R8R2□ | 6.2mH                         | 400μH                         | 0.8A          | 300Vac        |
| PLY10AN8720R7R2□ | 8.7mH                         | 530μH                         | 0.7A          | 300Vac        |
| PLY10AN9920R6R2□ | 9.9mH                         | 690μH                         | 0.6A          | 300Vac        |
| PLY10AN1430R5R2□ | 14.0mH                        | 1000μH                        | 0.5A          | 300Vac        |

Operating Temperature Range: -25°C to 60°C Winding Temperature Rise (at Rated Current): 60°C (max.)

Continued on the following page.

● This data sheet is applied for AC Line Filters Hybrid Choke Coils used for General Electronics equipment for your design.

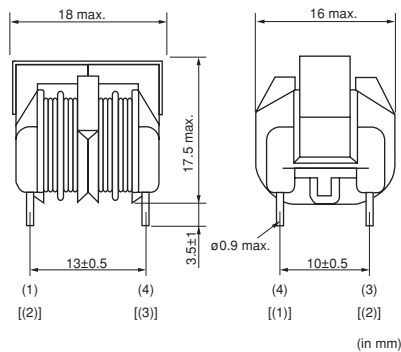
#### ⚠ Note:

- This datasheet is downloaded from the website of Murata Manufacturing co., ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

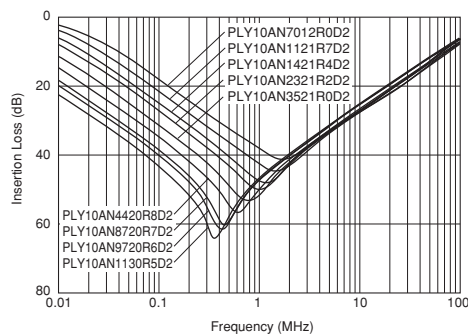
Continued from the preceding page.

## PLY10 Series Sectional Winding Type

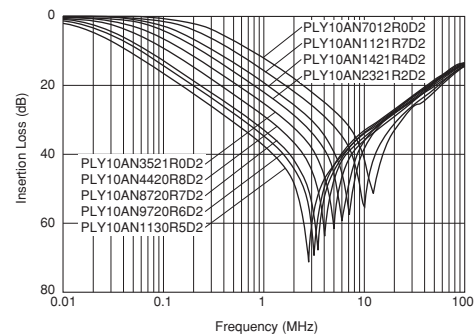
### ■ Dimensions



### ■ Common Mode Insertion Loss-Frequency Characteristics



### ■ Differential Mode Insertion Loss-Frequency Characteristics



### ■ Rated Value (□: packaging code)

| Part Number      | Common Mode Inductance (min.) | Normal Mode Inductance (min.) | Rated Current | Rated Voltage |
|------------------|-------------------------------|-------------------------------|---------------|---------------|
| PLY10AN7012R0D2□ | 0.7mH                         | 50μH                          | 2.0A          | 300Vac        |
| PLY10AN1121R7D2□ | 1.1mH                         | 65μH                          | 1.7A          | 300Vac        |
| PLY10AN1421R4D2□ | 1.4mH                         | 110μH                         | 1.4A          | 300Vac        |
| PLY10AN2321R2D2□ | 2.3mH                         | 160μH                         | 1.2A          | 300Vac        |
| PLY10AN3521R0D2□ | 3.5mH                         | 240μH                         | 1.0A          | 300Vac        |
| PLY10AN4420R8D2□ | 4.4mH                         | 320μH                         | 0.8A          | 300Vac        |
| PLY10AN8720R7D2□ | 8.7mH                         | 500μH                         | 0.7A          | 300Vac        |
| PLY10AN9720R6D2□ | 9.7mH                         | 670μH                         | 0.6A          | 300Vac        |
| PLY10AN1130R5D2□ | 11.0mH                        | 840μH                         | 0.5A          | 300Vac        |

Operating Temperature Range: -25°C to 60°C Winding Temperature Rise (at Rated Current): 60°C (max.)

Continued on the following page.

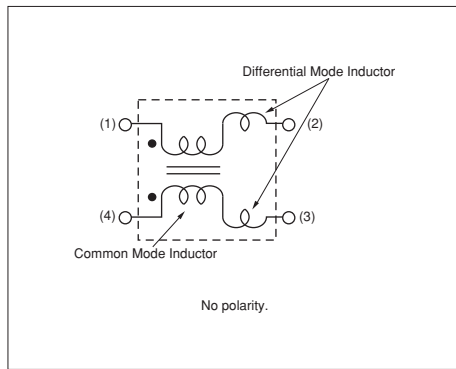
● This data sheet is applied for AC Line Filters Hybrid Choke Coils used for General Electronics equipment for your design.

#### ⚠ Note:

- This datasheet is downloaded from the website of Murata Manufacturing co., ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

 Continued from the preceding page.

## ■ Equivalent Circuit



## ■ Packaging

| Code     | Packaging | Minimum Quantity |
|----------|-----------|------------------|
| <b>M</b> | Magazine  | 1800             |
| <b>B</b> | Box       | 1200             |

## ■ ⚠ Caution (Rating)

### 1. Rated Current

Operating current should not exceed the rated value. Even if operating current is under the rated value, adequate ventilation is required to avoid excessive heat generated within the product (choke coil) and from surrounding heat sources. If exceeding these conditions, excessive heat may cause fumes or permanent damage to the product. Please ensure that product (choke coil) is evaluated and confirmed against the specification when it is mounted in your final assembled product.  
-> Winding temperature should be less than 120 degree C.

\*As for FKOB series winding temperature should be less than 95 degree C.

Maximum allowable temperature at the surface of coil (ambient temperature + winding temperature rise) is in accordance with each safety standard applicable to final assembled product.

When the temperature at winding exceeds maximum allowable temperature of safety standard, the rated current should be derated.

### 2. Inrush Current

Inrush current should not exceed 10 times rated current within 1/4 cycle of 50/60Hz commercial power line. Inrush current should be limited to a minimum of 10 seconds after last inrush.

If these conditions are exceeded, excessive heat may cause fumes or permanent damage to the component, or at worst cause ignition.

## ■ Notice (Soldering and Mounting)

### Magnetic Flux Leakage

Choke coils generate small amounts of magnetic flux leakage that may adversely affect equipment operation according to component arrangement.

Testing should be completed on final assembly to ensure equipment performance is not affected.

## ■ Notice (Other)

### Coil Humming Noise

Magnetic flux generated between coil and core or between the choke coil windings creates repulsive power between the coil windings. This repulsive power causes the coil winding to vibrate and create a humming noise. The amount of hum produced by the coil is proportionate to the amount of harmonic distortion generated by the operating current. This does not influence the electrical performance of the coils, but it should be considered and tested in actual circuit application.

● This data sheet is applied for AC Line Filters Hybrid Choke Coils used for General Electronics equipment for your design.

## ⚠ Note:

1. This datasheet is downloaded from the website of Murata Manufacturing co., ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.