



3-terminal filters

Feedthrough filter for power line

YFF-P series

YFF15PC 1005 [0402 inch]* Feed through filter YFF18PC 1608 [0603 inch]* Feed through filter

YFF18PH 1608 [0603 inch]* Feed through filter (thickness: 0.8mm)

YFF18PW 1608 [0603 inch]* Feedthrough filter (low ESL type)

YFF21PC 2012 [0805 inch]* Feed through filter YFF31PC 3216 [1206 inch]* Feed through filter

^{*} Dimensions Code JIS[EIA]



3-terminal filters

Feedthrough filter for power line

Product compatible with RoHS directive Compatible with lead-free solders

Overview of the YFF-P series

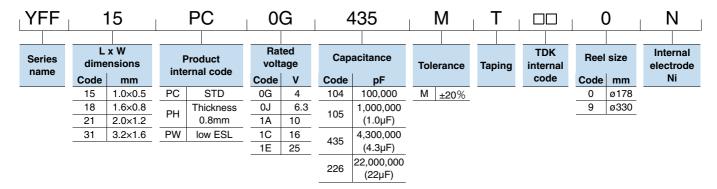
FEATURES

- Small and high-performance EMC components.
- OGood attenuation characteristic in a wide band range.
- OFor large current (2A to 4A) applications.

APPLICATION

For the power line of communication terminal devices, such as a smart phone, and AV and information devices.

■ PART NUMBER CONSTRUCTION



■ PACKAGING STYLE AND SPECIFICATIONS

| | Package quantit | Individual weight | |
|---------------|-----------------|-------------------|--------|
| Туре | ø178 | ø330 | |
| | (mm) | (mm) | (g) |
| YFF15PC | 10,000 | 50,000 | 0.0008 |
| YFF15PC0G435M | 10,000 | 50,000 | 0.0015 |
| YFF15PC0G755M | 10,000 | 50,000 | 0.0027 |
| YFF15PC0G106M | 10,000 | 50,000 | 0.0029 |
| YFF18PC | 4,000 | 10,000 | 0.0038 |
| YFF18PH | 4,000 | 10,000 | 0.0051 |
| YFF18PW | 4,000 | 10,000 | 0.0038 |
| YFF21PC | 4,000 | 10,000 | 0.0095 |
| YFF31PC | 2,000 | 10,000 | 0.0342 |

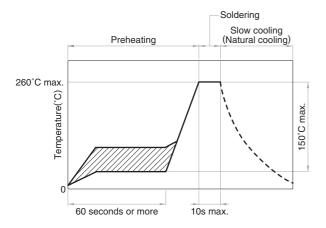
RoHS Directive Compliant Product: See the following for more details. https://product.tdk.com/info/en/environment/rohs/index.html

O Halogen-free: indicates that CI content is less than 900ppm, Br content is less than 900ppm, and that the total CI and Br content is less than 1500ppm.

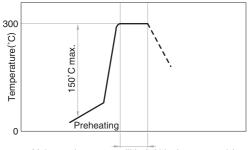
Overview of the YFF-P series

■ RECOMMENDED SOLDERING CONDITION

☐ REFLOW SOLDERING



☐ HAND SOLDERING



Make as short as possilble (within three seconds)

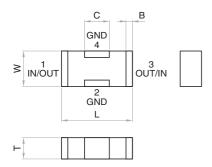
REMINDERS FOR USING THESE PRODUCTS

- \bigcirc Before soldering, be sure to preheat components. The ΔT preheating temperature must be 150°C max. with attention paid to thermal shock.
- ONatural cooling of components in the air is recommended. On the other hand, when dipping them in a solvent for purposes, such as cleaning, make sure that the temperature difference (ΔT) is 100°C.
- When performing hand soldering for circuit modification, apply the soldering iron to the copper foil area of the printed circuit board for 3 seconds or less. The temperature of the iron tip should not exceed 300°C.
- Ouse a wrist band to discharge static electricity in your body through the grounding wire.
- When incorporating the printed circuit board on which this product is mounted into a frame, etc., do not apply stress to the product through local bending of the board by tightening of screws, etc.

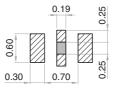


YFF-P series YFF15PC type

SHAPE & DIMENSIONS



■ RECOMMENDED LAND PATTERN



Land pattern+Solder resist
Land pattern
Dimensions in mm

| Part No. | L (mm) | W (mm) | T (mm) | B (mm) | C (mm) |
|--------------------|-----------|-----------|-----------|----------|-----------|
| YFF15PC0G106MT000N | 1.00±0.20 | 0.50±0.20 | 0.50±0.15 | 0.07min. | 0.35±0.10 |
| YFF15PC0G106MT009N | 1.00±0.20 | 0.50±0.20 | 0.50±0.15 | 0.07min. | 0.35±0.10 |
| YFF15PC0G755MT000N | 1.00±0.20 | 0.50±0.15 | 0.50±0.15 | 0.07min. | 0.35±0.10 |
| YFF15PC0G755MT009N | 1.00±0.20 | 0.50±0.15 | 0.50±0.15 | 0.07min. | 0.35±0.10 |
| YFF15PC0G435MT000N | 1.05±0.05 | 0.65±0.05 | 0.45±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0G435MT009N | 1.05±0.05 | 0.65±0.05 | 0.45±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0J105MT000N | 1.05±0.05 | 0.65±0.05 | 0.45±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0J105MT009N | 1.05±0.05 | 0.65±0.05 | 0.45±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0G105MT000N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0G105MT009N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0J474MT000N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC0J474MT009N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC1A224MT000N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC1A224MT009N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC1C104MT000N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |
| YFF15PC1C104MT009N | 1.00±0.05 | 0.55±0.05 | 0.30±0.05 | 0.09min. | 0.30±0.10 |

^{*} Make sure to connect the GND terminal of this product and the GND of the mounting circuit board by using through holes so that the distance between them is the shortest.

Background red: The product which is planning to stop production

ELECTRICAL CHARACTERISTICS

☐ CHARACTERISTICS SPECIFICATION TABLE

| Insertion loss 40dB frequency range | Rated voltage Edc | Rated current | temperature range range (After mount) | | Part No.* | |
|-------------------------------------|----------------------|---------------|---------------------------------------|-------------|---------------------------|--|
| (MHz) | (V) | (A) | (°C) | (°C) | | |
| 0.07 to 1000 | 4 | 2 | –55 to +85 | –55 to +85 | <u>YFF15PC0G106MT000N</u> | |
| 0.07 to 1000 | 4 | 2 | -55 to +85 | -55 to +85 | <u>YFF15PC0G106MT009N</u> | |
| 0.11 to 1000 | 4 | 2 | -55 to +85 | -55 to +85 | YFF15PC0G755MT000N | |
| 0.11 to 1000 | 4 | 2 | -55 to +85 | -55 to +85 | <u>YFF15PC0G755MT009N</u> | |
| 0.2 to 1000 | 4 | 2 | -55 to +85 | -55 to +85 | YFF15PC0G435MT000N | |
| 0.2 to 1000 | 4 | 2 | -55 to +85 | -55 to +85 | YFF15PC0G435MT009N | |
| 0.8 to 1000 | 4 | 3 | -55 to +105 | -55 to +105 | YFF15PC0J105MT000N | |
| 0.8 to 1000 | 4 | 3 | -55 to +105 | -55 to +105 | YFF15PC0J105MT009N | |
| 0.8 to 1000 | 4 | 3 | -55 to +105 | -55 to +105 | YFF15PC0G105MT000N | |
| 0.8 to 1000 | 4 | 3 | -55 to +105 | -55 to +105 | YFF15PC0G105MT009N | |
| 2 to 1000 | 6.3 | 3 | -55 to +105 | -55 to +105 | YFF15PC0J474MT000N | |
| 2 to 1000 | 6.3 | 3 | -55 to +105 | -55 to +105 | YFF15PC0J474MT009N | |
| 4 to 1000 | 10 | 3 | -55 to +105 | -55 to +105 | YFF15PC1A224MT000N | |
| 4 to 1000 | 10 | 3 | -55 to +105 | -55 to +105 | YFF15PC1A224MT009N | |
| 9 to 1000 | 16 | 3 | -55 to +105 | -55 to +105 | YFF15PC1C104MT000N | |
| 9 to 1000 | 16 | 3 | -55 to +105 | -55 to +105 | YFF15PC1C104MT009N | |

^{*} The part numbers are TDK's standard specification products.

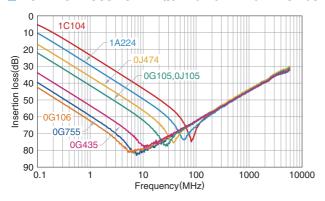
Background red: The product which is planning to stop production

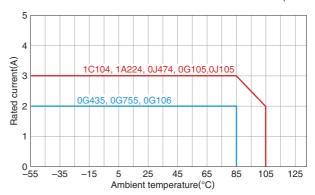


YFF-P series YFF15PC type

■ELECTRICAL CHARACTERISTICS GRAPH

☐ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS





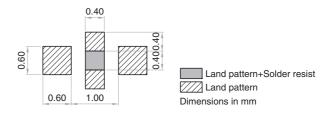


YFF-P series YFF18PC type

■SHAPE & DIMENSIONS

0.40±0.10 0.10min. GND 4 4 3 OUT/IN COUT/IN 1.60±0.20

■ RECOMMENDED LAND PATTERN



ELECTRICAL CHARACTERISTICS

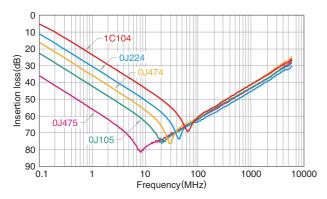
CHARACTERISTICS SPECIFICATION TABLE

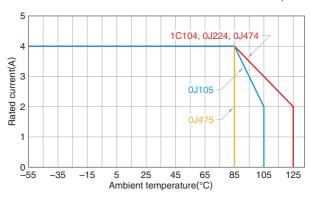
| Insertion loss 40dB frequency range (MHz) | Rated voltage Edc (V) | Rated current ldc (A) | Operating temperature range (°C) | Storage temperature range (After mount) (°C) | Part No.* |
|---|-----------------------------|-----------------------------|--|--|--------------------|
| 0.2 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PC0J475MT0H0N |
| 0.2 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PC0J475MT0H9N |
| 0.8 to 1000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PC0J105MT0H0N |
| 0.8 to 1000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PC0J105MT0H9N |
| 2 to 1000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PC0J474MT0H0N |
| 2 to 1000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PC0J474MT0H9N |
| 3 to 1000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PC0J224MT0H0N |
| 3 to 1000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PC0J224MT0H9N |
| 7 to 1000 | 16 | 4 | -55 to +125 | -55 to +125 | YFF18PC1C104MT0H0N |
| 7 to 1000 | 16 | 4 | -55 to +125 | -55 to +125 | YFF18PC1C104MT0H9N |

^{*} The part numbers are TDK's standard specification products.

ELECTRICAL CHARACTERISTICS GRAPH

☐ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS





^{*} Make sure to connect the GND terminal of this product and the GND of the mounting circuit board by using through holes so that the distance between them is the shortest.

A Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

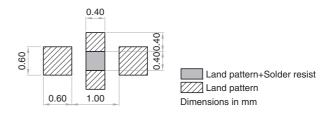


YFF-P series YFF18PH type

■SHAPE & DIMENSIONS

0.40±0.10 0.10min. GND 4 IN/OUT 2 GND 1.60±0.20

RECOMMENDED LAND PATTERN



ELECTRICAL CHARACTERISTICS

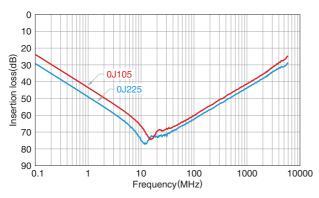
CHARACTERISTICS SPECIFICATION TABLE

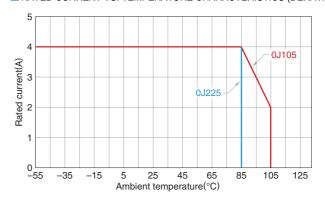
| Insertion loss | Rated voltage | Rated current | Operating | Storage temperature | Part No.* |
|----------------------|---------------|---------------|-------------------|---------------------|--------------------|
| 40dB frequency range | Edc | ldc | temperature range | range (After mount) | |
| (MHz) | (V) | (A) | (°C) | (°C) | |
| 0.4 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PH0J225MT000N |
| 0.4 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PH0J225MT009N |
| 0.8 to 1000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PH0J105MT000N |
| 0.8 to 1000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PH0J105MT009N |

 $[\]ensuremath{^{*}}$ The part numbers are TDK's standard specification products.

ELECTRICAL CHARACTERISTICS GRAPH

☐ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS





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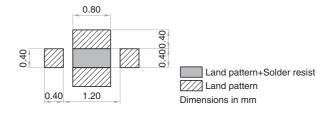
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YFF-P series YFF18PW type

■SHAPE & DIMENSIONS

RECOMMENDED LAND PATTERN



ELECTRICAL CHARACTERISTICS

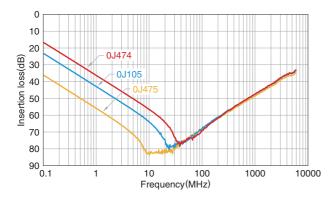
CHARACTERISTICS SPECIFICATION TABLE

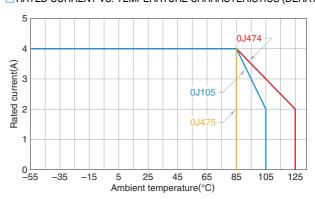
| Insertion loss 40dB frequency range (MHz) | Rated voltage Edc (V) | Rated current ldc (A) | Operating Storage temperature temperature range (°C) Storage temperature range (After mount) (°C) | | Part No.* |
|---|-----------------------------|-----------------------------|---|-------------|--------------------|
| 0.2 to 2000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PW0J475MT0H0N |
| 0.2 to 2000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF18PW0J475MT0H9N |
| 0.8 to 2000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PW0J105MT0H0N |
| 0.8 to 2000 | 6.3 | 4 | -55 to +105 | -55 to +105 | YFF18PW0J105MT0H9N |
| 2 to 2000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PW0J474MT0H0N |
| 2 to 2000 | 6.3 | 4 | -55 to +125 | -55 to +125 | YFF18PW0J474MT0H9N |

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ELECTRICAL CHARACTERISTICS GRAPH

☐ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS





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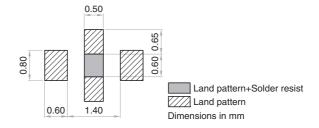


YFF-P series YFF21PC type

■SHAPE & DIMENSIONS

0.45±0.15 0.20min. GND 4 OUT/IN 2 GND 2.00±0.20

■ RECOMMENDED LAND PATTERN



ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

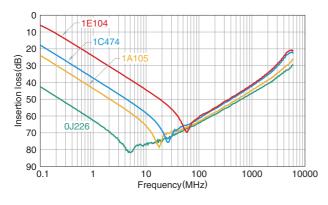
| Insertion loss 40dB frequency range | Rated voltage Edc | roltage Rated current Operating Idc temperature range | | Storage temperature range (After mount) | Part No.* | |
|--|----------------------|---|-------------|---|--------------------|--|
| (MHz) | (V) | (A) | (°C) | (°C) | | |
| 0.04 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF21PC0J226MT000N | |
| 0.04 to 1000 | 6.3 | 4 | -55 to +85 | -55 to +85 | YFF21PC0J226MT009N | |
| 0.7 to 1000 | 10 | 4 | -55 to +85 | -55 to +85 | YFF21PC1A105MT000N | |
| 0.7 to 1000 | 10 | 4 | -55 to +85 | -55 to +85 | YFF21PC1A105MT009N | |
| 2 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF21PC1C474MT000N | |
| 2 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF21PC1C474MT009N | |
| 7 to 1000 | 25 | 2 | -55 to +125 | -55 to +125 | YFF21PC1E104MT000N | |
| 7 to 1000 | 25 | 2 | -55 to +125 | -55 to +125 | YFF21PC1E104MT009N | |

^{*} The part numbers are TDK's standard specification products.

Background red: The product which is planning to stop production

■ELECTRICAL CHARACTERISTICS GRAPH

□ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS



^{*} Make sure to connect the GND terminal of this product and the GND of the mounting circuit board by using through holes so that the distance between them is the shortest.

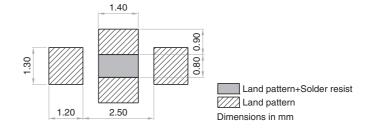
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YFF-P series YFF31PC type

■SHAPE & DIMENSIONS

■ RECOMMENDED LAND PATTERN



ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

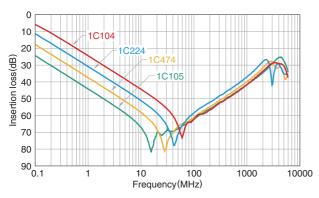
| Insertion loss 40dB frequency range | | | Operating temperature range | Storage temperature range (After mount) | Part No.* | | |
|--|-----|-----|-----------------------------|---|--------------------|--|--|
| (MHz) | (V) | (A) | (°C) | (°C) | | | |
| 0.7 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C105MT000N | | |
| 0.7 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C105MT009N | | |
| 2 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C474MT000N | | |
| 2 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C474MT009N | | |
| 3 to 600 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C224MT000N | | |
| 3 to 600 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C224MT009N | | |
| 7 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C104MT000N | | |
| 7 to 1000 | 16 | 2 | -55 to +125 | -55 to +125 | YFF31PC1C104MT009N | | |

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Background red: The product which is planning to stop production

■ELECTRICAL CHARACTERISTICS GRAPH

□ INSERTION LOSS VS. FREQUENCY CHARACTERISTICS



^{*} Make sure to connect the GND terminal of this product and the GND of the mounting circuit board by using through holes so that the distance between them is the shortest.

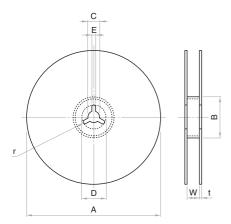
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YFF-P series

Packaging style

REEL DIMENSIONS



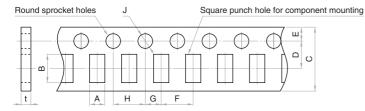
Dimensions in mm

Unit: mm

| Reel | A | В | С | D | Е | W | t | r |
|------|----------------------|----------|---------|---------|---------|----------|----------|-----|
| ø178 | ø178±2.0 | ø60±2.0 | ø13±0.5 | ø21±0.8 | 2.0±0.5 | 9.0±0.3 | 2.0±0.05 | 1.0 |
| ø330 | ø382 max.(ø330 nom.) | ø50 min. | ø13±0.5 | ø21±0.8 | 2.0±0.5 | 10.0±1.5 | 2.0±0.05 | 1.0 |

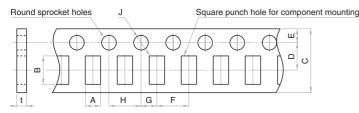
TAPE DIMENSIONS

□Paper tape



Unit: mm Туре В D G Α YFF15PC 0.62 typ. 1.12 typ. 0.7 max. YFF15PC0G435M 0.75 typ 1.18 typ. -8.00±0.30 3.50±0.05 1.75±0.10 2.00±0.05 2.00±0.05 4.00±0.10 ø1.5+0.1/-0 YFF15PC0G755M 1.30 typ. 0.75 typ 0.8 max. YFF15PC0G106M 0.77 typ. 1.30 typ. YFF18PC YFF18PH 3.50±0.05 4.00±0.10 2.00±0.05 4.00±0.10 1.10 typ. 1.90 typ. 8.00±0.30 1.75±0.10 ø1.5+0.1/-0 1.2 max. YFF18PW YFF21PC 1.50 typ. 2.30 typ. 8.00±0.30 3.50±0.05 1.75±0.10 4.00±0.10 2.00±0.05 4.00±0.10 ø1.5+0.1/-0 1.2 max.

□Plastic tape



Unit: mm

| Type | Α | В | С | D | E | F | G | Н | J | K | t | Q |
|---------|-----------|-----------|---------|----------|----------|----------|----------|----------|-------------|-----------|-----------|------------|
| YFF31PC | 1.90 typ. | 3.50 typ. | 8.0±0.3 | 3.5±0.05 | 1.75±0.1 | 4.00±0.1 | 2.0±0.05 | 4.00±0.1 | ø1.5+0.1/-0 | 2.50 max. | 0.30 max. | ø0.50 max. |