

# EMC Components

## UF Series

### Common Mode Choke Coils(Line Filters) for AC Power Supply

#### Compact and Separable Bobbin Type

TDK common mode choke coils(line filters) are used in a wide range of prevention of electromagnetic interference(EMI) and radio frequency interference(RFI) from power supply lines and for prevention of multifunctioning of products such as measuring equipment and system equipment.

#### RATINGS

Item	Standard value	Conditions
Rated voltage(V)	80 to 280	
Dielectric withstanding voltage(V)	2000	Between each winding for 1 minute
Insulation resistance (MΩ)	100min.	Between each winding for 1 minute, Edc 500V
Temperature rise(°C)	45max.*	With line resistance
Operating temperature range(°C)	-20 to +120	Including self-temperature rise
Safety standard	Japan Electric/Electronic Products Control Law, UL, CSA and IEC conformed(The safety standard is not acquired with the unit only.)	

\* Except particular items.

- Measuring equipment of inductance value:  
LCR meter(HP4261A, HP4263B or equivalent)

#### FEATURES

- Wide range of selection.
- High impedance at applicable frequency.
- High self-resonant frequency.

#### SELECTION CHART

Series	Configuration	Type	Inductance value min.	Rated current (A)	Handling power* $L \times I^2$ (mH×A <sup>2</sup> )	Weight (g)typ.	Minimum package quantity (pieces/box)
UF	Two sections bobbin types	UF1717V	0.2 to 10mH	0.25 to 1.6	0.6	3.5	640
		UF1717H	0.2 to 10mH	0.25 to 1.6	0.6	3.5	480
		UF2327L	2 to 45mH	0.5 to 2	10	17.5	1000
	Two sections bobbin types (For high frequency)	UF1717V	10 to 60μH	1 to 3	0.08	3	640
		UF1815SG	50 to 350μH	1 to 5	1.2	4.6	1280
	Four sections bobbin types	UF2327S4	2.7 to 45mH	0.4 to 1.6	7.5	17.5	1000

\* Handling power=(Inductance value)×(Current)<sup>2</sup>. It is possible to design within the range below this value.  
[Example] The coil for 2A can make even the inductance of 2.5mH or less a product for handling power 10.

#### PRODUCT IDENTIFICATION

UF □□□□ V □ - □□□Y □R□ - 01  
(1) (2) (3) (4) (5) (6) (7)

(1)Core shape

UF: U-type core

TF: Toroidal core

HF: Square shaped closed magnetic circuit core type

Double-square shaped closed magnetic circuit core type

(2)Dimensional code(Length×Height)

(3)External shape code

(4)TDK's internal code

(5)Inductance value

Example) 602: 60μH×10<sup>2</sup>=6mH

(6)Rated current value

Example) 2R5: 2.5A

(7)Product management number

# EMC Components

## UF Series

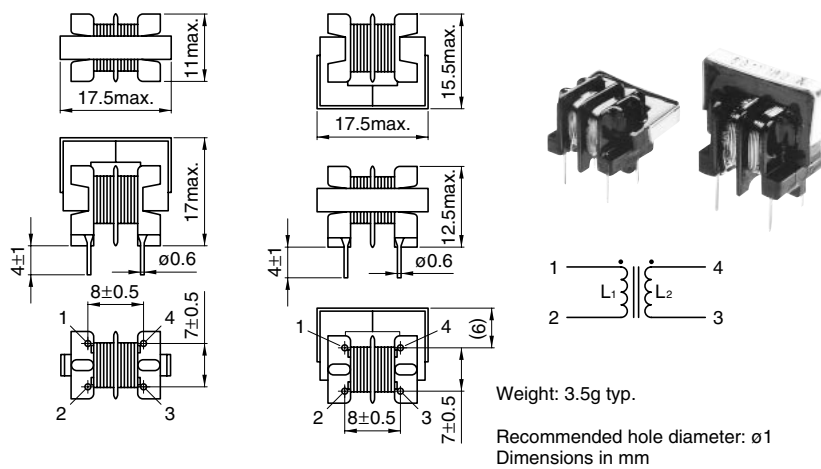
### Common Mode Choke Coils(Line Filters) for AC Power Supply Compact and Separable Bobbin Type

#### TWO SECTIONS BOBBIN TYPE UF SERIES

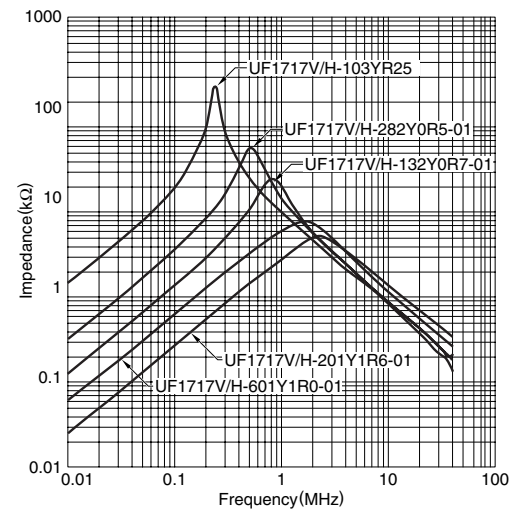
#### FEATURES

- This series is compact in size due to its use of high permeability ferrite core.

#### UF1717V/UF1717H(2 SEPARABLE BOBBIN) TYPES SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM UF1717V UF1717H



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (mH)min.	DC resistance (Ω)max.	Rated current (A)max.
UF1717V-103YR25-02	10	3.5	0.25
UF1717V-702Y0R3-01	7	2.5	0.3
UF1717V-342Y0R4-01	3.4	1.3	0.4
UF1717V-282Y0R5-01	2.8	1	0.5
UF1717V-152Y0R6-01	1.5	0.55	0.6
UF1717V-132Y0R7-01	1.3	0.5	0.7
UF1717V-601Y1R0-01	0.6	0.2	1
UF1717V-201Y1R6-01	0.2	0.1	1.6
UF1717H-103YR25-01	10	3.5	0.25
UF1717H-702Y0R3-01	7	2.5	0.3
UF1717H-342Y0R4-01	3.4	1.3	0.4
UF1717H-282Y0R5-01	2.8	1	0.5
UF1717H-152Y0R6-01	1.5	0.55	0.6
UF1717H-132Y0R7-01	1.3	0.5	0.7
UF1717H-601Y1R0-01	0.6	0.2	1
UF1717H-201Y1R6-01	0.2	0.1	1.6

#### APPLICABLE SAFETY STANDARD

Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2

- However, this product is not recognized by each regulations.

#### PACKAGING QUANTITIES

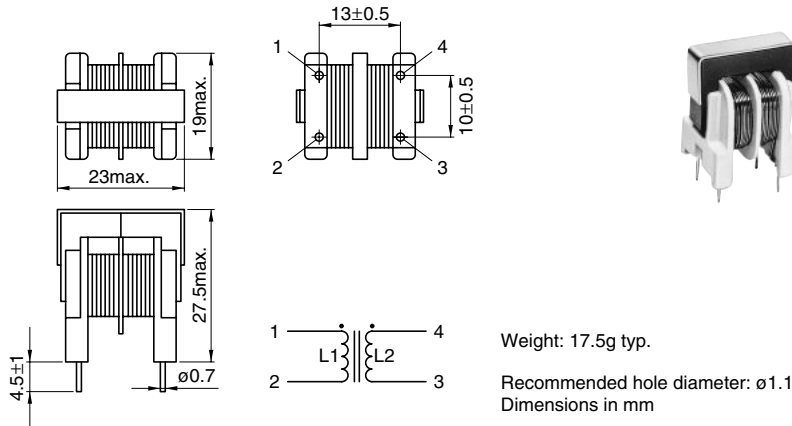
UF1717V	640pieces/box
UF1717H	480pieces/box

# EMC Components

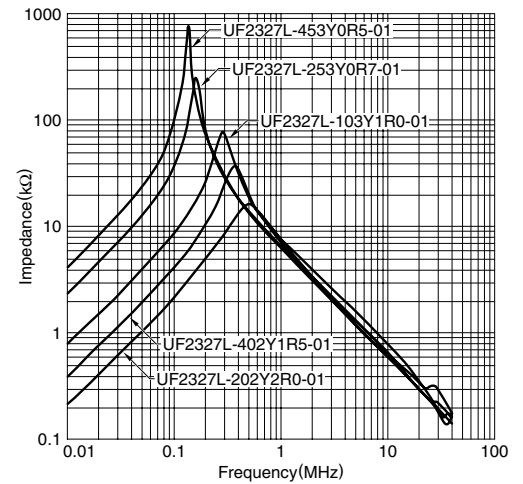
## UF Series

Common Mode Choke Coils(Line Filters) for AC Power Supply  
Compact and Separable Bobbin Type

### UF2327L(2 SEPARABLE BOBBIN) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (mH)min.	DC resistance ( $\Omega$ )max.	Rated current (A)max.
UF2327L-453Y0R5-01	45	2.3	0.5
UF2327L-253Y0R7-01	25	1.3	0.7
UF2327L-103Y1R0-01	10	0.5	1
UF2327L-402Y1R5-01	4	0.3	1.5
UF2327L-202Y2R0-01	2	0.15	2

### APPLICABLE SAFETY STANDARD

Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2

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### PACKAGING QUANTITIES

UF2327L	1000pieces/box
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# EMC Components

## UF Series

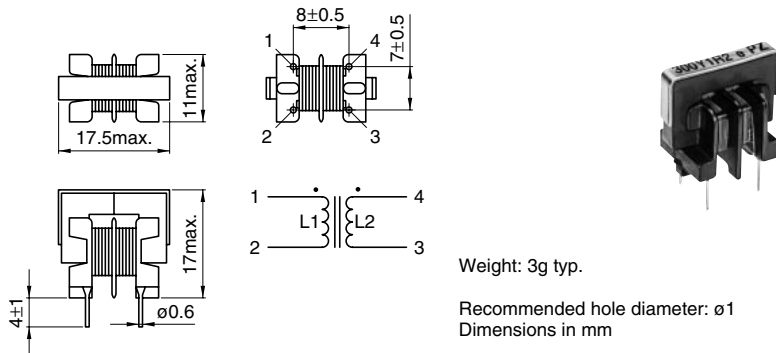
### Common Mode Choke Coils(Line Filters) for AC Power Supply Compact and Separable Bobbin Type

#### TWO SECTIONS BOBBIN TYPE (FOR HIGH FREQUENCY) UF SERIES

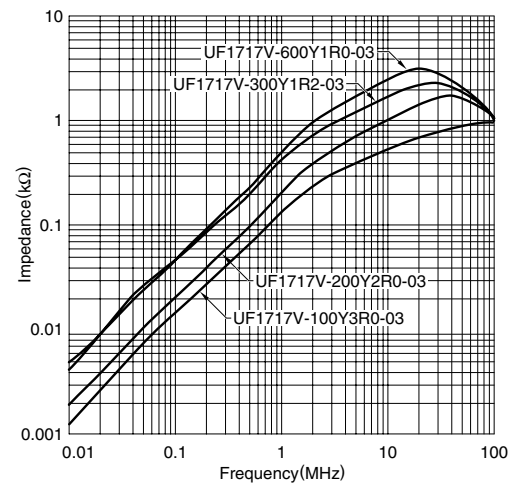
##### FEATURES

- This series is designed to reduce stray capacity between windings by using a single-layer coil construction on Ni-Zn ferrite cores, which offer excellent high frequency characteristics.
- This series provides excellent noise suppression for high frequency ranges including the FM band.
- Since the windings are divided into two sections, this filter can also be used as a signal line with excellent withstand voltage.

#### UF1717V(2 SEPARABLE BOBBIN FOR HIGH FREQUENCY) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)min.	DC resistance (mΩ)max.	Rated current (A)max.
UF1717V-600Y1R0-03	60	300	1
UF1717V-300Y1R2-03	30	150	1.2
UF1717V-200Y2R0-03	20	100	2
UF1717V-100Y3R0-03	10	50	3

#### APPLICABLE SAFETY STANDARD

Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2

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#### PACKAGING QUANTITIES

UF1717V	640pieces/box
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# EMC Components

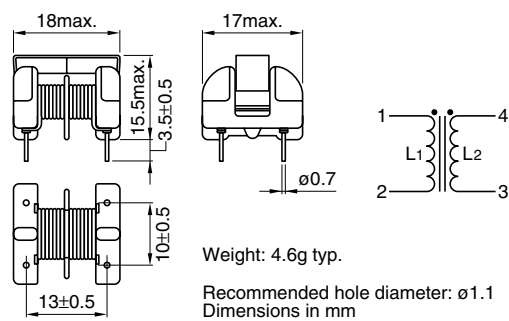
## UF Series

### Common Mode Choke Coils(Line Filters) for AC Power Supply Compact and Separable Bobbin Type

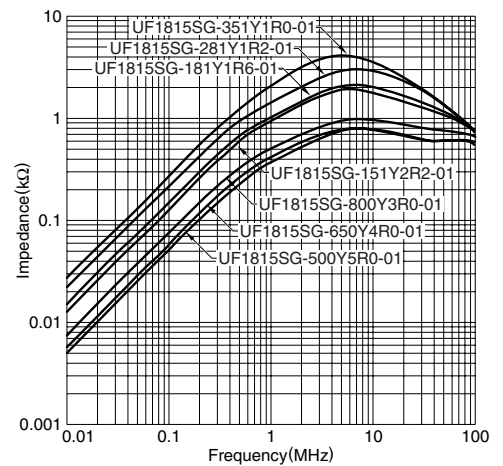
#### UF1815SG(2 SEPARABLE BOBBIN FOR HIGH FREQUENCY) TYPE FEATURES

- This series uses a Mn-Zn ferrite core and yet it offers excellent noise suppression into the high frequencies due to its low distributed inductance construction based on a single layer winding.
- This compact filter's inductance has been improved by as much as 50% compared to existing products of comparable sizes while its height profile has been reduced by approximately 30%.

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)min.	DC resistance (mΩ)max.	Rated current (A)max.
UF1815SG-351Y1R0-01	350	300	1
UF1815SG-281Y1R2-01	280	250	1.2
UF1815SG-181Y1R6-01	180	130	1.6
UF1815SG-151Y2R2-01	150	100	2.2
UF1815SG-800Y3R0-01	80	50	3
UF1815SG-650Y4R0-01	65	30	4
UF1815SG-500Y5R0-01	50	25	5

#### APPLICABLE SAFETY STANDARD

Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2

- However, this product is not recognized by each regulations.

#### PACKAGING QUANTITIES

UF1815SG	1280pieces/box
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## UF Series

### Common Mode Choke Coils(Line Filters) for AC Power Supply Compact and Separable Bobbin Type

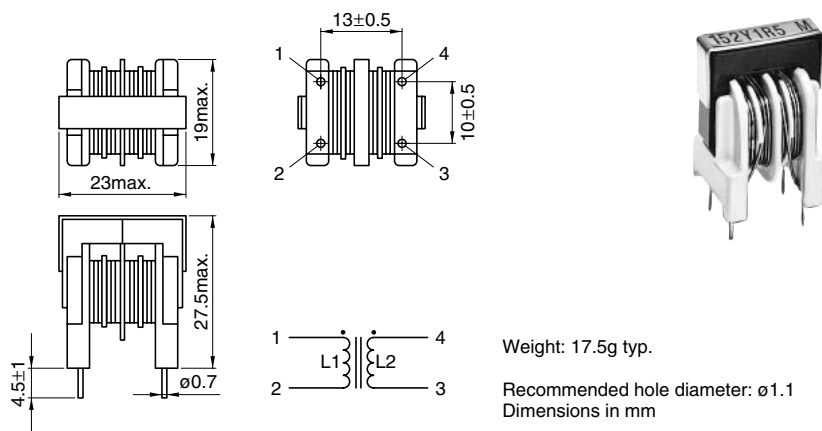
#### FOUR SECTIONS BOBBIN TYPE

#### UF SERIES

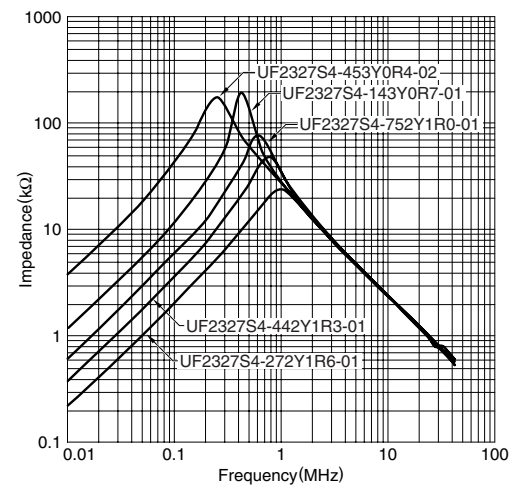
#### FEATURES

- By using two sections bobbin for each line, this filter provides large inductance, small stray capacity and impedance required for suppressing noise in high frequency ranges.

#### UF2327S4(FOUR SECTIONS BOBBIN FOR HIGH FREQUENCY) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### ELECTRICAL CHARACTERISTICS

Part No.	Inductance (mH)min.	DC resistance ( $\Omega$ )max.	Rated current (A)max.
UF2327S4-453Y0R4-02	45	3	0.4
UF2327S4-143Y0R7-01	14	1	0.7
UF2327S4-752Y1R0-01	7.5	0.55	1
UF2327S4-442Y1R3-01	4.4	0.3	1.3
UF2327S4-272Y1R6-01	2.7	0.2	1.6

#### APPLICABLE SAFETY STANDARD

Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2

- However, this product is not recognized by each regulations.

#### PACKAGING QUANTITIES

UF2327S4	1000pieces/box
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