(1/13)

### Common Mode Choke Coils(Line Filters) for AC Power Supply **Toroidal Core Type TF Series**

**Conformity to RoHS Directive** 

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.

#### FEATURES

· Wide range of selection.

SELECTION CHART

- · High impedance at applicable frequency.
- High self-resonant frequency.

### **PRODUCT IDENTIFICATION**

ΤF		V	-	А	ΠΠΠΛ	□R□	- 01
(1)	(2)	(3)		(4)	(5)	(6)	(7)

- (1) Core shape
- TF: Toroidal core (2) Dimensional code
- Width× Depth
- (3) External shape code V: Vertical type H: Horizontal type
- (4) High µ material
- (5) Inductance value Example) 133:13mH
- (6) Rated current value
- Example) 3R0:3.0A
- (7) Product management number

Series	Configuration	Туре	Inductance value min.	Rated current (A)	Handling power* L×I <sup>2</sup> (mH×A <sup>2</sup> )	Weight (g)typ.	Minimum package quantity (pieces/box)
		TF1813V	2 to 20mH	0.7 to 3.2	20	5	960
		TF2518V	0.65 to 9mH	2.5 to 10	50	15	560
	Vertical type	TF2721V	1 to 13mH	2.5 to 10	75	20	460
		TF3020V	0.35 to 13mH	3 to 20	130	30	440
TF		TF3525V	0.65 to 20mH	3 to 20	195	41	240
		TF1713H	2 to 20mH	0.7 to 3.2	20	5.3	960
		TF2520H	0.65 to 9mH	2.5 to 10	50	15	550
	Horizontal type	TF2722H	1 to 13mH	2.5 to 10	75	20	380
		TF3022H	0.35 to 13mH	3 to 20	130	32	320
		TF3526H	0.65 to 20mH	3 to 20	195	42	280
	Vertical type	TF2628V-1H	25 to 65µH	6 to 12	3.65	18	700
	(For high frequency)	TF3524V-1H	25 to 120µH	8 to 20	10.8	40	320

\* 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.

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

· All specifications are subject to change without notice.

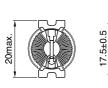
公

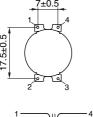
### Horizontal Type TF Series

### FEATURES

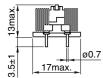
- This series uses a high permeability toroidal ferrite core and therefore provide large inductance with a little number of turns.
- Therefore its stray capacity is small and it keeps the impedance required to effectively suppress high frequency noises.
- Products mounted on a base with fixed leads are easy to insert to circuit boards.

## TF1713H-A(HORIZONTAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM











Weight: 5.3g typ. Recommended hole diameter: ø1.2 Dimensions in mm

### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.
20	0.73	0.7
15	0.44	1
6.5	0.19	1.6
5	0.14	2
2	0.065	3.2
	(mH)min. 20 15 6.5 5	(mH)min. (Ω)max.   20 0.73   15 0.44   6.5 0.19   5 0.14

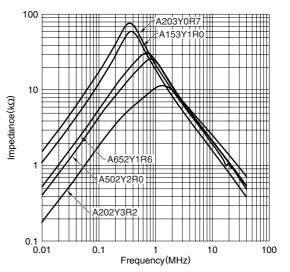
• Measuring equipment of inductance value:

LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF1713H-A 960pie
1F1/13H-A 960pie

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

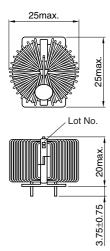


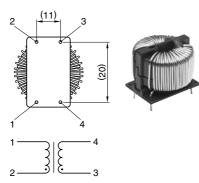
### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-2010 +120	rise	
Storage temperature	–20 to +85		
range(°C)	-20 10 +03		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	oldering tenperature*1 350±5°C, 5sec max. Soldering iron me		
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 DL (			

\*1 Pb free solder(Sn-3Ag-0.5Cu)

# TF2520H-A(HORIZONTAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM





Weight: 15g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

## ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.	ød (mm)
9	0.12	2.5	0.6
7	0.095	3	0.65
5	0.075	4	0.7
2.5	0.05	5	0.75
1	0.025	8	0.95
0.65	0.02	10	1
	(mH)min. 9 7 5 2.5 1	Inductance (mH)min. resistance (Ω)max.   9 0.12   7 0.095   5 0.075   2.5 0.05   1 0.025	Inductance (mH)min. resistance (Ω)max. current lac(A)max.   9 0.12 2.5   7 0.095 3   5 0.075 4   2.5 0.05 5   1 0.025 8

• Measuring equipment of inductance value:

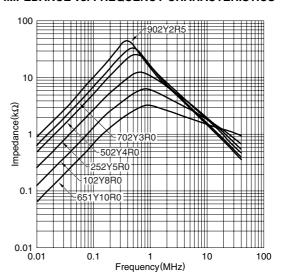
LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF2520H-A

550pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

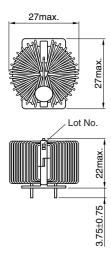


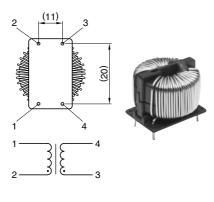
#### RATINGS

Item	Standard value	Conditions
Rated voltage(V)	80 to 280	50Hz/60Hz
Dielectric withstanding	2000	Between each winding for
voltage(V)	2000	1 minute
Insulation resistance	100min.	Between each winding for
(MΩ)	roomin.	DC.500V
Temperature rise(°C)	45max.	With line resistance
Operating temperature	-20 to +120	Including self-temperature
range(°C)	-2010 +120	rise
Storage temperature range(°C)	–20 to +85	
Resistance to	260±5°C, 10±1sec	Solder bath method
soldering tenperature*1	Soldering iron method	
Applicable safety	and Material Safety	
standard*2 Law ("DENAN"), IEC60065, UL6500, CSA C		
*1 Ph free solder(Sn-3A	a-0.5Cu)	

\*1 Pb free solder(Sn-3Ag-0.5Cu)

## TF2722H-A(HORIZONTAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM





Weight: 20g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

## ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (mH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF2722H-A133Y2R5-01	13	130	2.5	0.65
TF2722H-A103Y3R0-01	10	90	3	0.7
TF2722H-A652Y4R0-01	6.5	60	4	0.8
TF2722H-A422Y5R0-01	4.2	40	5	0.9
TF2722H-A152Y8R0-01	1.5	20	8	1
TF2722H-A102Y10R0-01	1	11	10	1.2

Measuring equipment of inductance value:

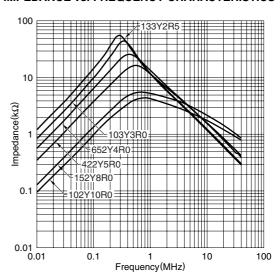
LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF2722H-A

380pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

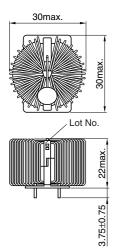


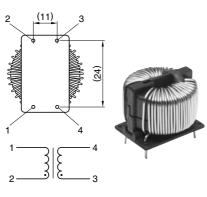
#### RATINGS

Item	Standard value	Conditions
Rated voltage(V)	80 to 280	50Hz/60Hz
Dielectric withstanding	2000	Between each winding for
voltage(V)	2000	1 minute
Insulation resistance	100min.	Between each winding for
(MΩ)	TOOMIN.	DC.500V
Temperature rise(°C)	45max.	With line resistance
Operating temperature	-20 to +120	Including self-temperature
range(°C)	-2010 +120	rise
Storage temperature range(°C)	–20 to +85	
Resistance to	260±5°C, 10±1sec	Solder bath method
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method
Applicable safety	Electrical Appliance	and Material Safety
standard*2 Law ("DENAN"), IEC60065, UL6500, CSA C		
*1 Ph free solder(Sn-3A	a-0.5Cu)	

<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

### TF3022H-A(HORIZONTAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM





Weight: 32g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

## ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

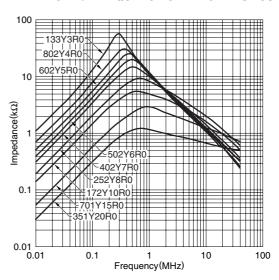
Part No.	Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.	ød (mm)
TF3022H-A133Y3R0-01	13	0.1	3	0.75
TF3022H-A802Y4R0-01	8	0.07	4	0.8
TF3022H-A602Y5R0-01	6	0.05	5	0.9
TF3022H-A502Y6R0-01	5	0.04	6	0.95
TF3022H-A402Y7R0-01	4	0.035	7	1
TF3022H-A252Y8R0-01	2.5	0.025	8	1.1
TF3022H-A172Y10R0-01	1.7	0.015	10	1.3
TF3022H-A701Y15R0-01	0.7	0.007	15	1.6
TF3022H-A351Y20R0-01	0.35	0.005	20	1.7

 Measuring equipment of inductance value: LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF3022H-A	320pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

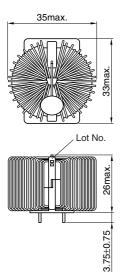


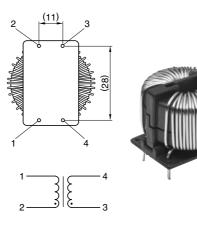
#### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-20 10 +120	rise	
Storage temperature	-20 to +85		
range(°C)	-20 10 +65		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method	
Applicable safety	Electrical Appliance	and Material Safety	
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Dh free colder(Cr. OA			

\*1 Pb free solder(Sn-3Ag-0.5Cu)

### TF3526H-A(HORIZONTAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM





Weight: 42g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

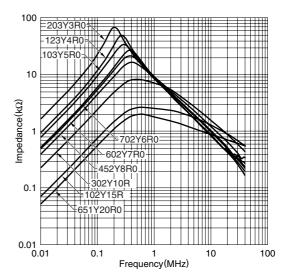
Part No.	Inductance (mH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF3526H-A203Y3R0-01	20	130	3	0.75
TF3526H-A123Y4R0-01	12	75	4	0.85
TF3526H-A103Y5R0-01	10	55	5	0.95
TF3526H-A702Y6R0-01	7	45	6	1
TF3526H-A602Y7R0-01	6	35	7	1.1
TF3526H-A452Y8R0-01	4.5	25	8	1.2
TF3526H-A302Y10R0-01	3	18	10	1.3
TF3526H-A102Y15R0-01	1	6	15	1.7
TF3526H-A651Y20R0-01	0.65	4	20	1.8

 Measuring equipment of inductance value: LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

280pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-20 10 +120	rise	
Storage temperature	–20 to +85		
range(°C)	-2010+65		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method	
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Ph free colder(Sp 2A			

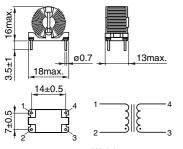
\*1 Pb free solder(Sn-3Ag-0.5Cu)

**DK** 

**⇔**T

### Vertical Type TF Series

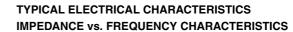
## TF1813V-A(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

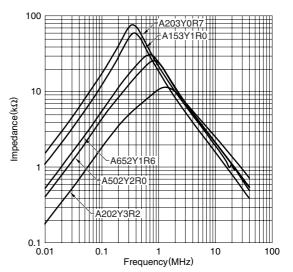




Weight: 5g typ.

Recommended hole diameter: ø1.2 Dimensions in mm





### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.
TF1813V-A203Y0R7-01	20	0.73	0.7
TF1813V-A153Y1R0-01	15	0.44	1
TF1813V-A652Y1R6-01	6.5	0.19	1.6
TF1813V-A502Y2R0-01	5	0.14	2
TF1813V-A202Y3R2-01	2	0.065	3.2

 Measuring equipment of inductance value: LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF1813V-A

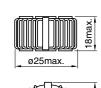
960pieces/box

### RATINGS

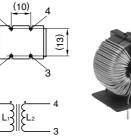
Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)		DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-20 10 +120	rise	
Storage temperature range(°C)	-20 to +85		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method	
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Ph froe solder(Sp_3A			

\*1 Pb free solder(Sn-3Ag-0.5Cu)

### TF2518V-A(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



3.75±0.75



Weight: 15g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

ød

Part No.	Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.	ød (mm)
TF2518V-A902Y2R5-01	9	0.12	2.5	0.6
TF2518V-A702Y3R0-01	7	0.095	3	0.65
TF2518V-A502Y4R0-01	5	0.075	4	0.7
TF2518V-A252Y5R0-01	2.5	0.05	5	0.75
TF2518V-A102Y8R0-01	1	0.025	8	0.95
TF2518V-A651Y10R0-01	0.65	0.02	10	1

• Measuring equipment of inductance value:

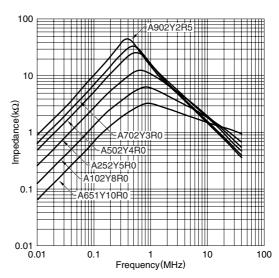
LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF2518V-A

560pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

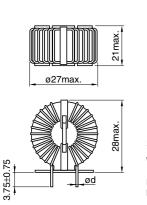


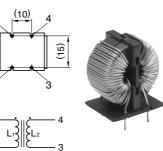
#### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-2010 +120	rise	
Storage temperature	-20 to +85		
range(°C)	-2010+03		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method	
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Ph froe solder(Sp_3A	a-0.5Cu)		

\*1 Pb free solder(Sn-3Ag-0.5Cu)

### TF2721V-A(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM





Weight: 20g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (mH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF2721V-A133Y2R5-01	13	130	2.5	0.65
TF2721V-A103Y3R0-01	10	90	3	0.7
TF2721V-A652Y4R0-01	6.5	60	4	0.8
TF2721V-A422Y5R0-01	4.2	40	5	0.9
TF2721V-A152Y8R0-01	1.5	20	8	1
TF2721V-A102Y10R0-01	1	11	10	1.2

Measuring equipment of inductance value:

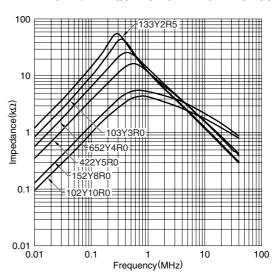
LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF2721V-A

460pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

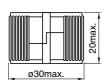


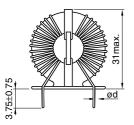
#### RATINGS

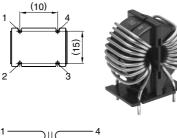
Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	TOOMIN.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-2010 +120	rise	
Storage temperature	-20 to +85		
range(°C)	-2010+03		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method	
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Ph froe solder(Sp_3A	a-0.5Cu)		

\*1 Pb free solder(Sn-3Ag-0.5Cu)

### TF3020V-A(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM







Weight: 30g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

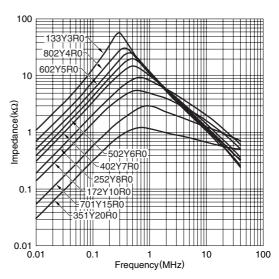
Part No.	Inductance (mH)min.	DC resistance (Ω)max.	Rated current lac(A)max.	ød (mm)
TF3020V-A133Y3R0-01	13	0.1	3	0.75
TF3020V-A802Y4R0-01	8	0.07	4	0.8
TF3020V-A602Y5R0-01	6	0.05	5	0.9
TF3020V-A502Y6R0-01	5	0.04	6	0.95
TF3020V-A402Y7R0-01	4	0.035	7	1
TF3020V-A252Y8R0-01	2.5	0.025	8	1.1
TF3020V-A172Y10R0-01	1.7	0.015	10	1.3
TF3020V-A701Y15R0-01	0.7	0.007	15	1.6
TF3020V-A351Y20R0-01	0.35	0.005	20	1.7

 Measuring equipment of inductance value: LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### PACKAGING QUANTITIES

TF3020V-A	440pieces/box

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

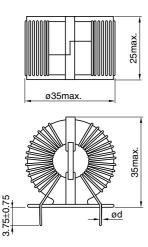


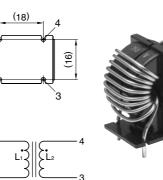
#### RATINGS

Item	Standard value	Conditions
Rated voltage(V)	80 to 280	50Hz/60Hz
Dielectric withstanding	2000	Between each winding for
voltage(V)	2000	1 minute
Insulation resistance	100min.	Between each winding for
(MΩ)	TOOMIN.	DC.500V
Temperature rise(°C)	45max.	With line resistance
Operating temperature	-20 to +120	Including self-temperature
range(°C)	-20 10 +120	rise
Storage temperature	-20 to +85	
range(°C)	-20 10 +05	
Resistance to	260±5°C, 10±1sec	Solder bath method
soldering tenperature*1	350±5°C, 5sec max.	Soldering iron method
*1 Dh free colder/Cr. OA		

\*1 Pb free solder(Sn-3Ag-0.5Cu)

### TF3525V-A(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

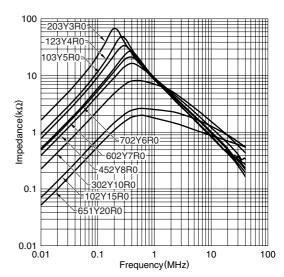




Weight: 41g typ.

Recommended hole diameter: ød+0.5 Dimensions in mm

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



### **ELECTRICAL CHARACTERISTICS** (STANDARD LINE UP)

Part No.	Inductance (mH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF3525V-A203Y3R0-01	20	130	3	0.75
TF3525V-A123Y4R0-01	12	75	4	0.85
TF3525V-A103Y5R0-01	10	55	5	0.95
TF3525V-A702Y6R0-01	7	45	6	1
TF3525V-A602Y7R0-01	6	35	7	1.1
TF3525V-A452Y8R0-01	4.5	25	8	1.2
TF3525V-A302Y10R0-01	3	18	10	1.3
TF3525V-A102Y15R0-01	1	6	15	1.7
TF3525V-A651Y20R0-01	0.65	4	20	1.8

• Measuring equipment of inductance value: LCR meter(HP4261A, HP4263B or equivalent)[f=1kHz]

#### **PACKAGING QUANTITIES**

TF3525V-A	240pieces/box

RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
<u>(</u> ΜΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-2010+120	rise	
Storage temperature	–20 to +85		
range(°C)			
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max. Soldering iron method		
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
1 51 6 11 6 64	a <b>- a</b> )		

\*1 Pb free solder(Sn-3Ag-0.5Cu)

緻

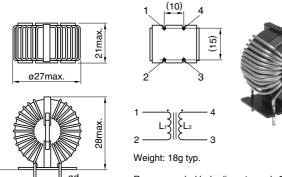
### Vertical Type (For High Frequency) TF Series

### FEATURES

511

- 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.

### TF2628V-1H(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



Recommended hole diameter: ød+0.5 Dimensions in mm

### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (µH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF2628V-650Y6R0-1H	65	20	6	0.8
TF2628V-450Y9R0-1H	45	12	9	1
TF2628V-250Y12R0-1H	25	9	12	1.2

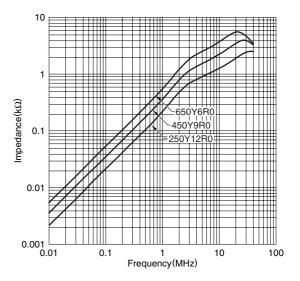
• Measuring equipment of inductance value:

LCR meter(HP4261A, HP4263B or equivalent)[f=10kHz]

### PACKAGING QUANTITIES

TF2628V-1H 7	700pieces/box
--------------	---------------

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

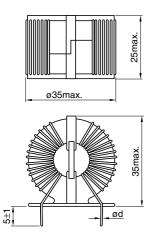


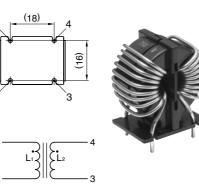
#### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding voltage(V)	2000	Between each winding for 1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	-20 to +120	Including self-temperature	
range(°C)	-20 10 +120	rise	
Storage temperature	-20 to +85		
range(°C)	-20 10 +03		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max. Soldering iron method		
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Dis franz and dis r/Ora OA			

\*1 Pb free solder(Sn-3Ag-0.5Cu)

# TF3524V-1H(VERTICAL TYPE WITH TERMINAL BASE) TYPE SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



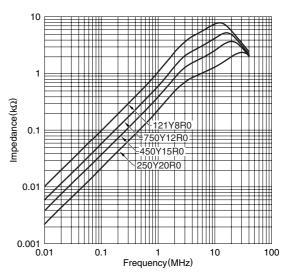


Weight: 40g typ.

2

Recommended hole diameter: ød+0.5 Dimensions in mm

### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (µH)min.	DC resistance (mΩ)max.	Rated current lac(A)max.	ød (mm)
TF3524V-121Y8R0-1H	120	20	8	1
TF3524V-750Y12R0-1H	75	10	12	1.3
TF3524V-450Y15R0-1H	45	7	15	1.6
TF3524V-250Y20R0-1H	25	5	20	1.8

320pieces/box

• Measuring equipment of inductance value:

LCR meter(HP4261A, HP4263B or equivalent)[f=10kHz]

### PACKAGING QUANTITIES

TF3524V-1H

#### RATINGS

Item	Standard value	Conditions	
Rated voltage(V)	80 to 280	50Hz/60Hz	
Dielectric withstanding	2000	Between each winding for	
voltage(V)	2000	1 minute	
Insulation resistance	100min.	Between each winding for	
(MΩ)	roomin.	DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature	20 to 120	Including self-temperature	
range(°C)	-20 to +120	rise	
Storage temperature	-20 to +85		
range(°C)	-20 10 +65		
Resistance to	260±5°C, 10±1sec	Solder bath method	
soldering tenperature*1	350±5°C, 5sec max. Soldering iron method		
Applicable safety	Electrical Appliance and Material Safety		
standard*2	Law ("DENAN"), IEC60065, UL6500, CSA C22.2		
*1 Dis fus a salala u/Ous OA			

\*1 Pb free solder(Sn-3Ag-0.5Cu)