

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

### PRODUCT IDENTIFICATION

TF		٧	- A	$\square\square\square\square$	□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

### **SELECTION CHART**

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
TF		TF3020V	0.35 to 13mH	3 to 20	130	30	440
		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

<sup>\*</sup> Handling power=(Inductance value)× (Current)². 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.

<sup>•</sup> 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.

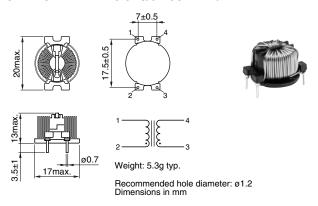


### Horizontal Type TF Series

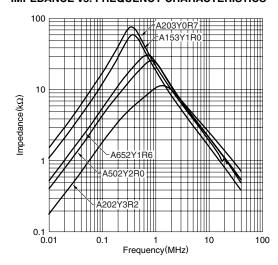
### **FEATURES**

- 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



# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance	DC resistance	Rated current
rait No.	(mH)min.	$(\Omega)$ max.	lac(A)max.
TF1713H-A203Y0R7-01	20	0.73	0.7
TF1713H-A153Y1R0-01	15	0.44	1
TF1713H-A652Y1R6-01	6.5	0.19	1.6
TF1713H-A502Y2R0-01	5	0.14	2
TF1713H-A202Y3R2-01	2	0.065	3.2

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

### **PACKAGING QUANTITIES**

TF1713H-A	960pieces/box	
1F1/13H-A	960pieces/box	

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	
$(M\Omega)$	TOOTHITI.	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 C		
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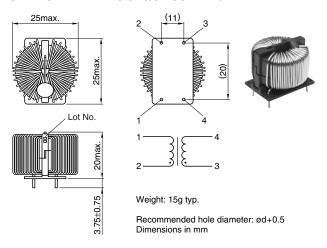
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.



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



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

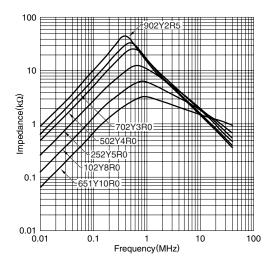
Inductance (mH)min.	DC resistance $(\Omega)$ max.	Rated current lac(A)max.	ød (mm)
9	0.12	2.5	0.6
7	0.095	3	0.65
5	0.075	4	0.7
2.5	0.05	5	0.75
1	0.025	8	0.95
0.65	0.02	10	1
	(mH)min. 9 7 5 2.5	Inductance (mH)min.         resistance (Ω)max.           9         0.12           7         0.095          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

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

### **PACKAGING QUANTITIES**

TECECOLLA	EEO.:://
TF2520H-A	550pieces/box

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



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	
$(M\Omega)$	TOOTHITI.	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		

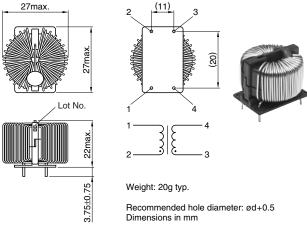
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.



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



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

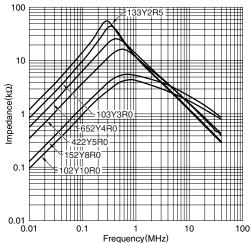
Part No.	)
TF2722H-A133Y2R5-01 13 130 2.5 0.65	
TF2722H-A103Y3R0-01 10 90 3 0.7	
TF2722H-A652Y4R0-01 6.5 60 4 0.8	
TF2722H-A422Y5R0-01 4.2 40 5 0.9	
TF2722H-A152Y8R0-01 1.5 20 8 1	
TF2722H-A102Y10R0-01 1 11 10 1.2	

• 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**



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	
$(M\Omega)$	TOOTHITI.	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		

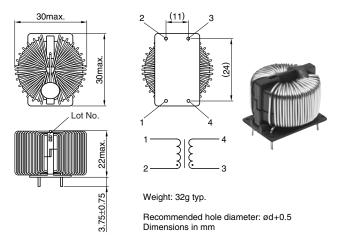
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

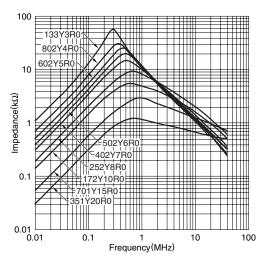
<sup>•</sup> All specifications are subject to change without notice.



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



# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# 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

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	
$(M\Omega)$	TOOTHITI.	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		

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

<sup>\*2</sup> However, this product is not recognized by each regulations.

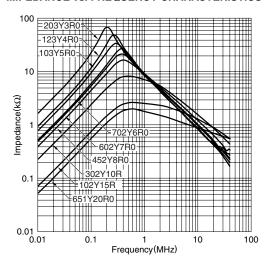
<sup>•</sup> All specifications are subject to change without notice.



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

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# 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)
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**

TF3526H-A	280pieces/box

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 (MΩ)	100min.	Between each winding for DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature range(°C)	-20 to +120	Including self-temperature 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		

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

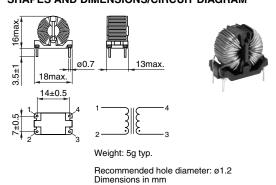
 $<sup>^{*2}</sup>$  However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.



## Vertical Type TF Series

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



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

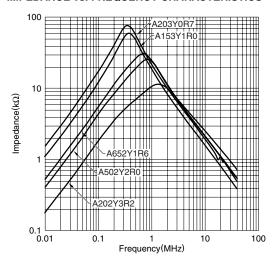
Inductance (mH)min.	DC resistance $(\Omega)$ max.	Rated current lac(A)max.
20	0.73	0.7
15	0.44	1
6.5	0.19	1.6
5	0.14	2
2	0.065	3.2
	(mH)min. 20 15 6.5 5	(mH)min. (Ω)max. 20 0.73 15 0.44 6.5 0.19 5 0.14

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

### **PACKAGING QUANTITIES**

TF1813V-A	960pieces/box

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



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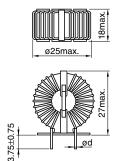
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

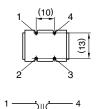
<sup>\*2</sup> However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.



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



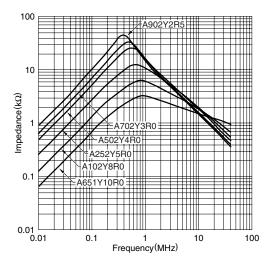




Weight: 15g typ.

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 $(\Omega)$ 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	ECOningge/how
1F2316V-A	560pieces/box

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	
$(M\Omega)$	TOOTHIT.	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		

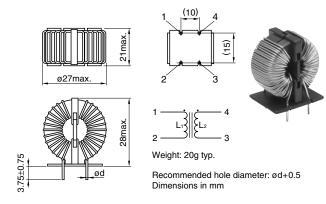
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

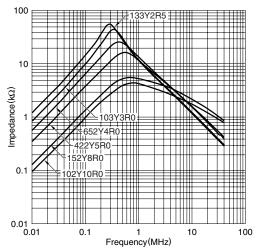
<sup>•</sup> All specifications are subject to change without notice.



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



# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Inductance (mH)min.	DC resistance $(m\Omega)$ max.	Rated current lac(A)max.	ød (mm)
13	130	2.5	0.65
10	90	3	0.7
6.5	60	4	0.8
4.2	40	5	0.9
1.5	20	8	1
1	11	10	1.2
	(mH)min. 13 10 6.5 4.2	Inductance (mH)min.     resistance (mΩ)max.       13     130       10     90       6.5     60       4.2     40       1.5     20	Inductance (mH)min.         resistance (mΩ)max.         current lac(A)max.           13         130         2.5           10         90         3           6.5         60         4           4.2         40         5           1.5         20         8

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

### **PACKAGING QUANTITIES**

TF2721V-A	400-1/
1 F2 / 2 I V-A	460pieces/box

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		
$(M\Omega)$	TOOTHIT.	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			

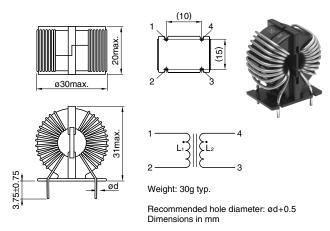
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

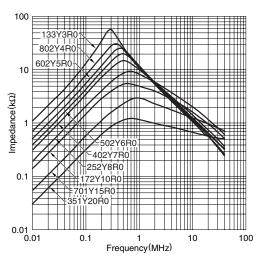
<sup>•</sup> All specifications are subject to change without notice.



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



# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (mH)min.	DC resistance $(\Omega)$ 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

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 $(M\Omega)$	100min.	Between each winding for DC.500V
Temperature rise(°C)	45max.	With line resistance
Operating temperature range(°C)	-20 to +120	Including self-temperature 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

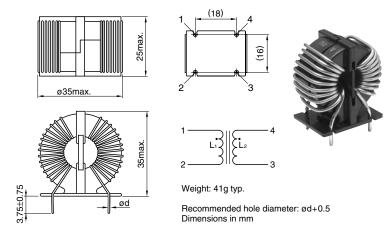
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

<sup>\*2</sup> However, this product is not recognized by each regulations.

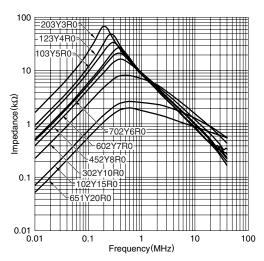
<sup>•</sup> All specifications are subject to change without notice.



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



# 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

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 (M $\Omega$ )	100min.	Between each winding for DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature range(°C)	-20 to +120	Including self-temperature 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		

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

 $<sup>^{*2}</sup>$  However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.

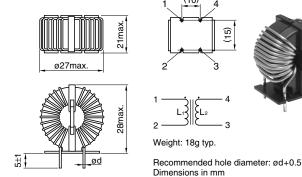


### Vertical Type (For High Frequency) TF Series

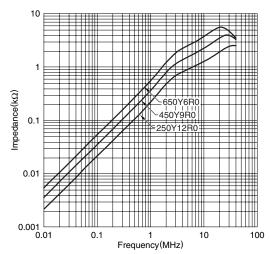
### **FEATURES**

- 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.

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



# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



# ELECTRICAL CHARACTERISTICS (STANDARD LINE UP)

Part No.	Inductance (μΗ)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	700pieces/box	

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 (M $\Omega$ )	100min.	Between each winding for DC.500V	
Temperature rise(°C)	45max.	With line resistance	
Operating temperature range(°C)	-20 to +120	Including self-temperature 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 standard*2	Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2		

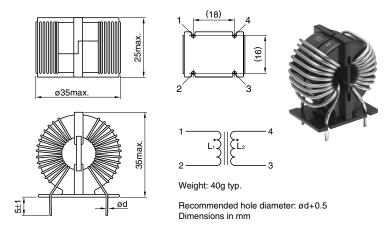
<sup>\*1</sup> Pb free solder(Sn-3Ag-0.5Cu)

 $<sup>^{\</sup>ast 2}$  However, this product is not recognized by each regulations.

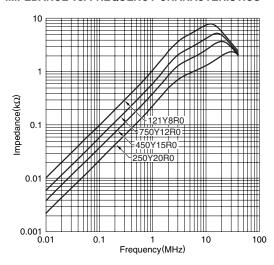
<sup>•</sup> All specifications are subject to change without notice.



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



# 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

Measuring equipment of inductance value:
 LCR meter(HP4261A, HP4263B or equivalent)[f=10kHz]

### **PACKAGING QUANTITIES**

	TF3524V-1H	320pieces/box
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Standard value	Conditions
80 to 280	50Hz/60Hz
2000	Between each winding for 1 minute
100min.	Between each winding for DC.500V
45max.	With line resistance
-20 to +120	Including self-temperature rise
-20 to +85	
260±5°C, 10±1sec	Solder bath method
350±5°C, 5sec max.	Soldering iron method
Electrical Appliance and Material Safety Law ("DENAN"), IEC60065, UL6500, CSA C22.2	
	2000  100min.  45max.  -20 to +120  -20 to +85  260±5°C, 10±1sec 350±5°C, 5sec max. Electrical Appliance

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

<sup>\*2</sup> However, this product is not recognized by each regulations.

<sup>•</sup> All specifications are subject to change without notice.