

EMC Components

SF1 Series

Differential Mode Choke Coils for Signal Line and DC Power Line
Pin Terminal
For Noise Suppression

FEATURES

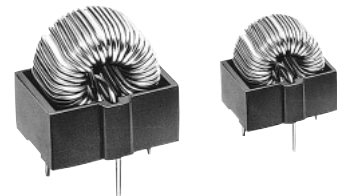
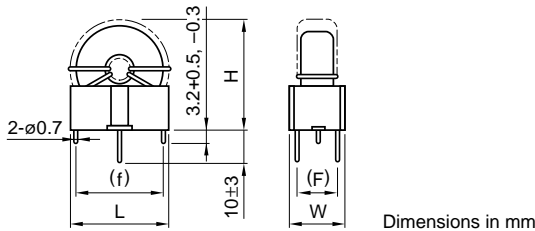
- The SF series chokes feature cores with high saturation magnetic flux density. They thereby provide an effective means of combating pluse EMC.
- By using an advanced amorphous metal alloy core, the SF series are able to provide line noise attenuation performance equivalent to conventional ferrite-based chokes but with far more compact dimensions and fewer coil turns. They can thus be implemented in high-density circuit configurations to comply with various EMC-related regulations.

TYPICAL CHARACTERISTICS OF SF CORE

μ [300kHz]	75
$\tan\delta$ [\mathmu[300kHz]	3×10^{-3}
Applicable frequency	10MHz max.
Temperature stability[-20 to +60°C]	5.2%
Bs[24kA/m]	1400mT

SHAPES AND DIMENSIONS/ELECTRICAL CHARACTERISTICS

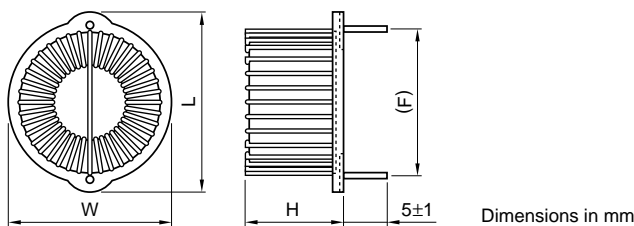
SF1-T SERIES, ON BOARD TYPE WITH BASE (WITH SUPPORT PIN TERMINAL)



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Diameter of winding wire*2 ø(mm)	Dimensions(mm)					Weight (g)
					L max.	W max.	H max.	(F)*3	(f)*3	
SF1-T5-30-01	1	30	80	0.4	13.5	9	14	(7.5)	(10)	2.9
SF1-T5-40-01	1	80	110	0.4	13.5	9	14.5	(7.5)	(10)	2.7
SF1-T8-30S-01	2	26	55	0.6	18	12.5	18	(9.7)	(14)	5.5
SF1-T8-40S-01	2	46	70	0.6	18	12.5	18	(9.7)	(14)	6
SF1-T8-50S-01	2	72	85	0.6	18	12.5	18	(9.7)	(14)	6.5
SF1-T8-50D-01	2	125	100	0.6	18.5	15.5	18	(13)	(14)	9

*1LCR METER: YHP4261A, 1kHz(L ≤ 190μH:70mA, L > 190μH:10mA) *2UEW (Grade 1) *3Reference value

SF1-T SERIES, HORIZONTAL ON BOARD TYPE WITH BASE (WITHOUT SUPPORT PIN TERMINAL)



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Diameter of winding wire*2 ø(mm)	Dimensions(mm)					Weight (g)
					L max.	W max.	H max.	(F)*3		
SF1-T5-40-02	1	80	110	0.4	16.5	14	8.9	(12.7)	3.5	
SF1-T5-35-02	2	63	75	0.5	16.5	14	8.9	(12.7)	3	
SF1-T8-50S-02	2	72	85	0.6	19	17	10.5	(15.2)	6	
SF1-T10-30-02	3	40	40	0.8	26.5	22	15	(20)	13	
SF1-T10-40-02	3	72	50	0.8	26.5	22	15	(20)	14	
SF1-T10-50-02	3	110	70	0.8	26.5	22	15	(20)	16	
SF1-T12-30-02	5	35	30	1	30.5	26	16.5	(25)	18.5	
SF1-T12-40-02	5	64	40	1	30.5	26	16.5	(25)	20	
SF1-T12-50-02	5	100	50	1	30.5	26	16.5	(25)	22.5	

*1LCR METER: YHP4261A, 1kHz(L ≤ 190μH:70mA, L > 190μH:10mA) *2UEW (Grade 1) *3Reference value

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SF1 Series

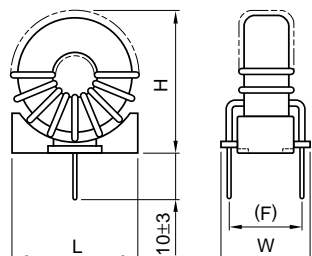
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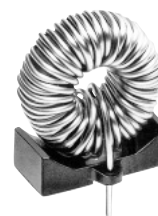
For Noise Suppression

SHAPES AND DIMENSIONS/ELECTRICAL CHARACTERISTICS

SF1-T SERIES, ON BOARD TYPE WITH BASE (WITHOUT SUPPORT PIN TERMINAL)



Dimensions in mm



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Diameter of winding wire*2 ø(mm)	Dimensions(mm)				Weight (g)
					L max.	W max.	H max.	(F)*3	
SF1-T10-30-01	3	40	40	0.8	24	18	25	12.5	13.5
SF1-T10-40-01	3	72	50	0.8	24	18	25	12.5	14.5
SF1-T10-50-01	3	110	70	0.8	24	18	25	12.5	16
SF1-T12-30-01	5	35	30	1	26	18	29	12.5	18
SF1-T12-40-01	5	64	40	1	26	18	29	12.5	20
SF1-T12-50-01	5	100	50	1	26	18	29	12.5	23
SF1-300Y10A-01	10	30	10	1.6	33	18	37	12.5	47.5
SF1-800Y10A-01	10	80	16	1.5	33	18	37	12.5	53

*1LCR METER: YHP4261A, 1kHz(L ≤ 190μH:70mA, L > 190μH:10mA) *2UEW (Grade 1) *3Reference value