

SURGE ABSORBENT NORMAL MODE CHOKES

SF series

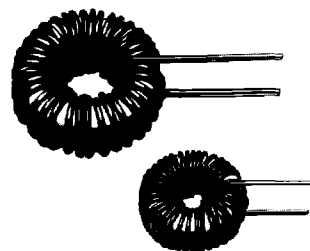
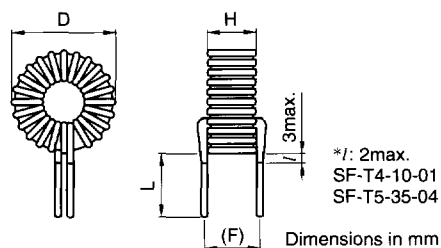
FEATURES

- TDK SF core features a high saturated magnetic flux density. It is an advanced core material which sufficiently complies with the requirements for the prevention of EMI pulse.
- TDK has not only developed the automatic winding technology (higher inductance use) for the toroidal type core but also developed series of on-board type products which can maintain sufficient stability even under severe soldering conditions in order to deal with higher density mounting of circuits and to reinforce the EMI related regulations.

TYPICAL CHARACTERISTICS OF SF CORE

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

STANDARD TYPE



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Shape	Diameter of winding wire*2 ø(mm)	Dimensions(mm)				Weight (g)
						D max.	H max.	L	(F)*3	
SF-T3-20-01	1	10	40	SF-T3	0.4	8.5	6	20±3	5.5	1
SF-T5-30-03	1	30	80	SF-T5	0.4	12.5	6	25±3	6	5
SF-T5-60	1	110	280	SF-T5	0.4	14	9	25±3	6	3
SF-T8-90S-01	1	200	150	SF-T8S	0.6	18	11	25±3	8	6.5
SF-T8-85S-01	1	250	200	SF-T8S	0.45	18	11	25±3	8	5.5
SF-T8-70D-02	1	300	150	SF-T8D	0.6	19	13	25±3	11	8.5
SF-T8-110S-01	1	350	300	SF-T8S	0.45	17.5	10	25±3	8	6
SF-T8-70L-01	1	375	400	SF-T8L	0.45	18	10.5	25±3	8	8.9
SF-T12-130-01	1	700	300	SF-T12	0.6	26	12.5	25±3	10	17.5
SF-T5-17-02	2	10	30	SF-T5	0.55	13.5	8	25±3	6	3
SF-T5-25-01	2	32	42	SF-T5	0.55	13	7	25±3	6	3
SF-T8-30S	2	26	55	SF-T8S	0.6	17	9.5	25±3	8	5
SF-T8-40S	2	46	70	SF-T8S	0.6	17	9.5	25±3	8	5.5
SF-T8-50S	2	72	85	SF-T8S	0.6	17	9.5	25±3	8	6
SF-T8-30D	2	45	70	SF-T8D	0.6	17	12	25±3	11	6.5
SF-T8-40D	2	80	85	SF-T8D	0.6	17	12	25±3	11	7.5
SF-T8-50D	2	125	100	SF-T8D	0.6	17	12.5	25±3	10	8
SF-T8-60L-02	2	200	115	SF-T8L	0.6	19	11	25±3	8	9.5
SF-T8-70L-02	2	260	160	SF-T8L	0.55	19	11	25±3	8	9.5
SF-T10-80-01	2	300	160	SF-T10	0.6	22	12	25±3	10	12
SF-T12-85D-01	2	470	150	SF-T12D	0.7	29	17	25±3	12	23
SF-T10-40	3	72	50	SF-T10	0.8	23	12.5	25±3	10	13
SF-T10-50	3	110	70	SF-T10	0.8	23	12.5	25±3	10	14

*1LCR METER: YHP4261A, 1kHz(L≤190μH:70mA, L>190μH:10mA)

*2UEW (Grade 1)

*3Reference value



Filters
EMI/EMC
Line choke coil

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SF series

STANDARD TYPE

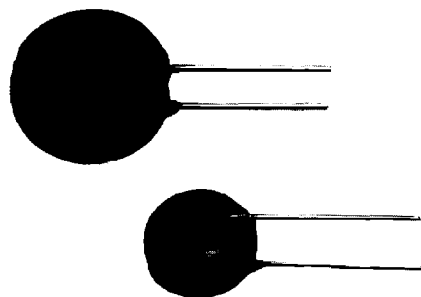
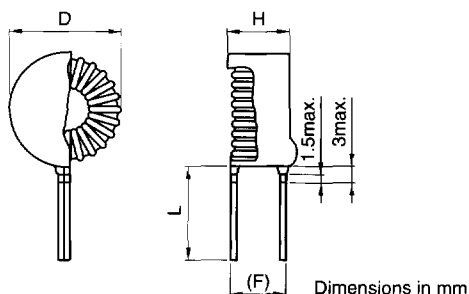
Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Shape	Diameter of winding wire*2 ø(mm)	Dimensions(mm)			(F)*3	Weight (g)
						D max.	H max.	L		
SF-T10-60-01	3	160	80	SF-T10	0.8	24	13	25±3	10	14
SF-T12-95-01	3	400	110	SF-T12	0.8	26.5	13.5	25±3	10	20
SF-T12-75D-01	3	470	115	SF-T12D	0.8	29	17	25±3	12	27
SF-T12-30	5	35	30	SF-T12	1	26	12	25±3	10	17
SF-T12-40	5	64	40	SF-T12	1	26	12.5	25±3	10	17.5
SF-T12-50	5	100	50	SF-T12	1	26	13	25±3	10	20
SF-T12-60-05	5	140	50	SF-T12	1	27	14	25±3	10	21
SF-T12-75-02	5	200	60	SF-T12	1	27	14	25±3	10	23
SF-T13-60-03	5	240	55	SF-T13	1	30	15	25±3	13	30.5
SF-T15-85L-03	5	600	120	SF-T15L	1	35	20	25±3	15	52
SF-T15-40L-01	8	100	20	SF-T15L	1.5	33.5	18	20±3	17	55
SF-T13-35-01	10	65	30	SF-T13	1.6	31	18.5	25±3	16	40

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*2UEW (Grade 1)

*3Reference value

MOLDED TYPE



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Shape	Diameter of winding wire*2 ø(mm)	Dimensions(mm)			(F)*3	Weight (g)
						D max.	H max.	L		
SF-T8-30SM	2	26	55	SF-T8S	0.6	19	11	25±3	8	5.5
SF-T8-40SM	2	46	70	SF-T8S	0.6	20	11	25±3	8	5.5
SF-T8-50SM	2	72	85	SF-T8S	0.6	20	11	25±3	8	6.5
SF-T8-30DM	2	45	70	SF-T8D	0.6	19	13	25±3	11	8.5
SF-T8-40DM	2	80	85	SF-T8D	0.6	20	15	25±3	11	9
SF-T8-50DM	2	125	100	SF-T8D	0.6	20	15	25±3	11	9.5
SF-T10-30M	3	40	40	SF-T10	0.8	24	13	25±3	10	14
SF-T10-40M	3	72	50	SF-T10	0.8	25	14	25±3	10	15
SF-T10-50M	3	110	70	SF-T10	0.8	25	14	25±3	10	16
SF-T12-30M	5	35	30	SF-T12	1	30	15	25±3	10	19
SF-T12-40M	5	64	40	SF-T12	1	30	15	25±3	10	20
SF-T12-50M	5	100	50	SF-T12	1	30	15	25±3	10	22

*1 LCR METER: YHP4261A, 1kHz(L≤190μH:70mA, L>190μH:10mA)

*2 UEW (Grade 1)

*3 Reference value

- Please contact TDK, when specifying dimensions of the center hole for the coil.
- Be cautions when handling molded types since the coating might crack or peel off if the lead wire is pulled in a right angle. However, even if the coating cracks or peels off, there will be no damage to the electrical characteristics.



Specifications which provide more details for the proper and safe use of the described product are available upon request.

All specifications are subject to change without notice.

3-21
Catalog No. AVE-002

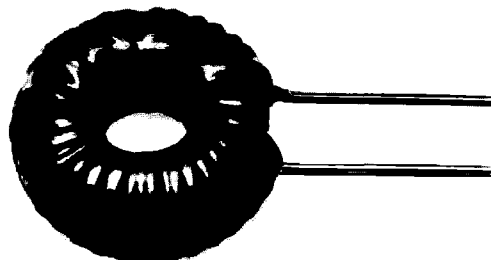
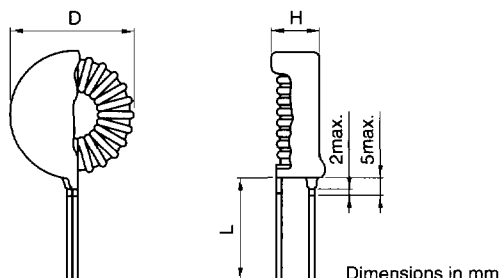
TDK
TDK CORPORATION

Filters
EMI/EMC
Line choke coil

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MOLDED TYPE FOR LARGE CURRENT



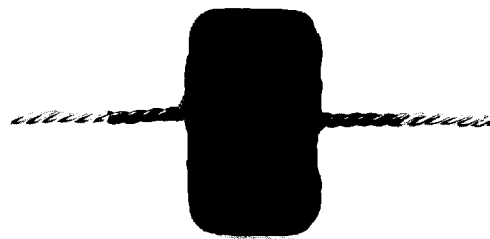
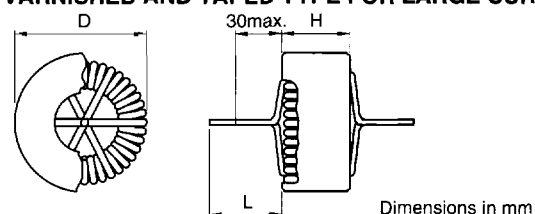
Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Shape	Diameter of winding wire*2 ø(mm)	Dimensions(mm)			Weight (g)
						D max.	H max.	L	
SF-HP-6A-01	6	100	40	SF-T13	1.2	35	20	50±5	37
SF-HP-8A-01	8	100	25	SF-T15L	1.5	37	20	50±5	61
SF-HP-10A-01	10	60	20	SF-T24	1.8	52	25	50±5	133
SF-HP-15A-01	15	60	20	SF-T27	2.3	60	28	50±5	167

*1 LCR METER: YHP4261A, 1kHz(L≤190μH:70mA, L>190μH:10mA)

*2 PEW (Grade 1)

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- Be cautions when handling molded types since the coating might crack or peel off if the lead wire is pulled in a right angle. However, even if the coating cracks or peels off, there will be no damage to the electrical characteristics.

VARNISHED AND TAPED TYPE FOR LARGE CURRENT



Part No.	Rated current (A)max.	Inductance*1 (μH)min.	DC resistance (mΩ)max.	Shape	Diameter of winding wire*2 ø(mm)	Dimensions(mm)			Weight (g)
						D max.	H max.	L	
SF-HP-20A-01	20	60	15	SF-T36 (1)	1.8×2	70	28	50±5	230
SF-HP-30A-01	30	60	10	SF-T36 (2)	1.8×3	72	43	50±5	420
SF-HP-40A-01	40	60	10	SF-T36 (3)	1.8×3	72	60	50±5	670
SF-HP-60A-01	60	60	10	SF-T36 (3)	2×3	72	60	50±5	760

*1 LCR METER: YHP4261A, 1kHz(L≤190μH:70mA, L>190μH:10mA)

*2 PEW (Grade 1)

- Please contact us, when specifying dimensions of the center hole for the coil.
- When coil temperature exceeds 100°C, Please use forced cooling as well. (SF-HP-20A-01, SF-HP-30A-01, SF-HP-40A-01, SF-HP-60A-01)

