SF Series

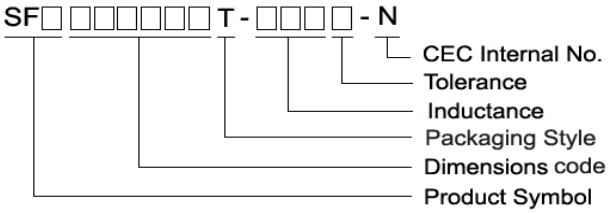
Features

- RoHS, Halogen Free and REACH Compliance
- Surface mount inductors designed for high speed, high current switch mode applications requiring lower inductance
- Gapped ferrite cores for maximum efficiency
- Customized specifications are available

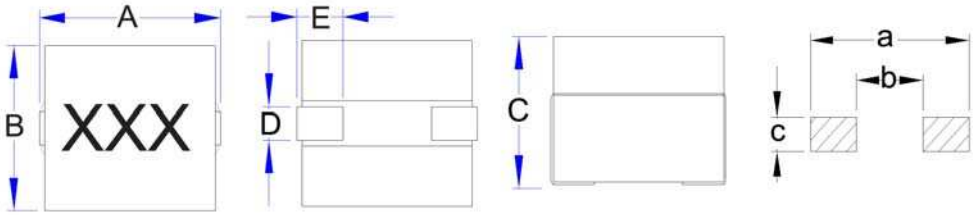
Applications

- Voltage regulator modules (VRMs) for servers, microprocessors
- High frequency, high current switching power supplies

Product Identification



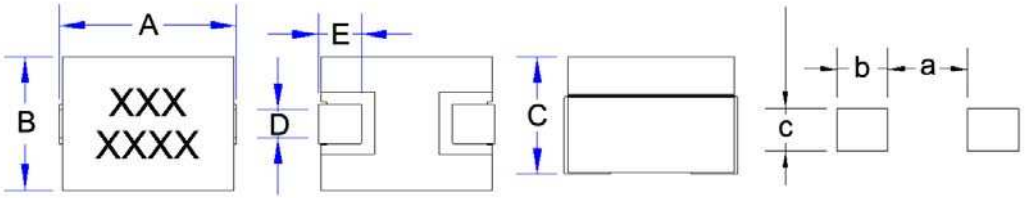
Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E	a	b	c
SFD100707	11.0 Max	7.5 Max	7.0 Max	1.6±0.2	2.6±0.3	11.0	4.3	2

Shape and Dimensions



Dimensions in mm

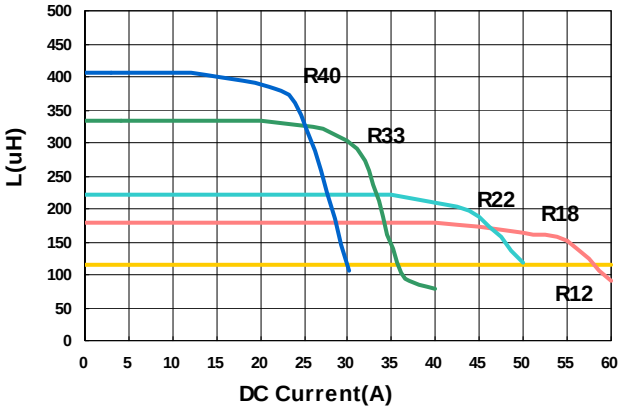
TYPE	A	B	C	D	E	a	b	c
SFS100875	10.2±0.2	8.0 Max	7.3±0.2	2.2±0.2	2.54±0.5	4.7	3.0	2.5

Electrical Characteristics

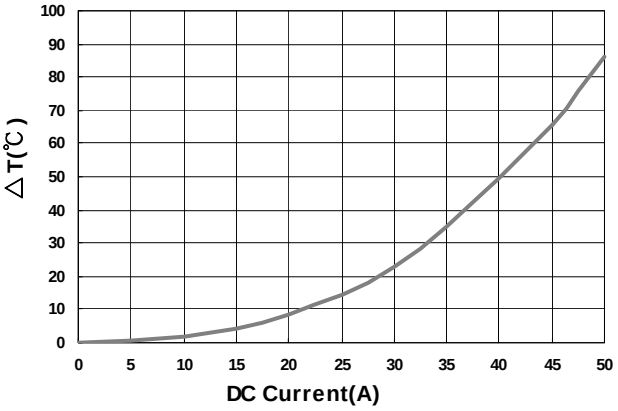
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (KHz)	RDC (mΩ) ±7%	Isat (A) Max	Irms (A) Max
SFD100707T-R12L-N	0.15	15	100	0.37	60	37
SFD100707T-R18L-N	0.17	15	100	0.37	50	37
SFD100707T-R22L-N	0.22	15	100	0.37	40	37
SFD100707T-R33L-N	0.27	15	100	0.37	28	37
SFD100707T-R40L-N	0.30	15	100	0.37	21	37

- Customized Specifications are available
- OCL (Open Circuit Inductance) Test parameters: 100KHz, 0.25Vrms, 0Adc & Isat @20℃
- DC current for an approximate △T of 40℃ without core loss. Dera ting is necessary for AC currents. PCB layout, trace thickness and width, airflow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 155℃ under worst case operating conditions verified in the end application.
- Operating ambient temperature range: -40℃ to +125℃(Including self - temperature rise)
- Tested L: WK4237METER RDC:HK502BC METER Isat : WK3260B/ 3265B METER

Inductance vs. DC Current



Temperature Change vs. DC Current

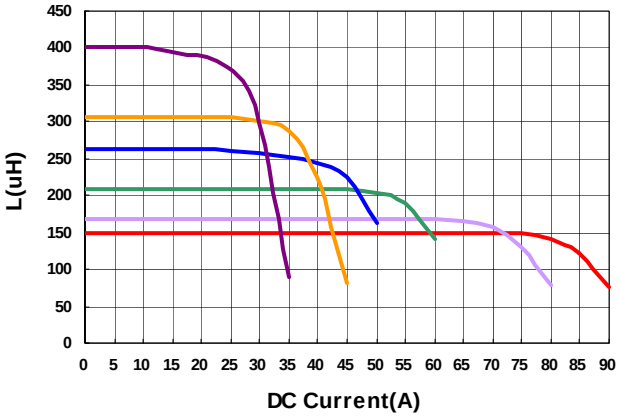


Electrical Characteristics

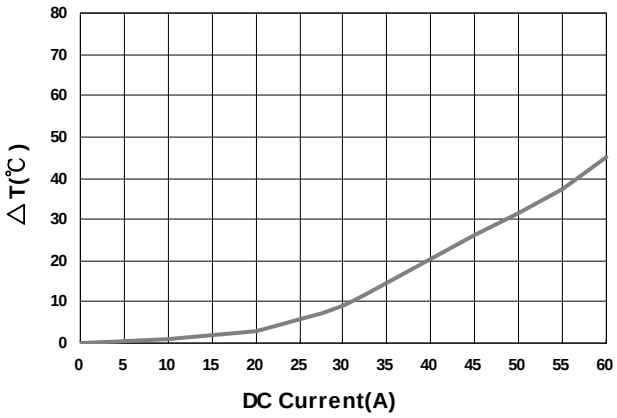
Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (KHz)	RDC (mΩ) ±6%	Isat (A) Max	Irms (A) Max
SFS100875T-R15K-N	0.15	10	100	0.29	76	56
SFS100875T-R17K-N	0.17	10	100	0.29	66	56
SFS100875T-R22K-N	0.22	10	100	0.29	50	56
SFS100875T-R27K-N	0.27	10	100	0.29	40	56
SFS100875T-R30K-N	0.30	10	100	0.29	35	56
SFS100875T-R40L-N	0.40	15	100	0.29	25	56

- Customized Specifications are available
- OCL (Open Circuit Inductance) Test parameters: 100KHz, 1Vrms, 0Adc & Isat @20℃
- DC current for an approximate △T of 40℃ without core loss. Dera ting is necessary for AC currents. PCB layout, trace thickness and width, airflow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 155℃ under worst case operating conditions verified in the end application.
- Operating ambient temperature range: -40℃ to +125℃(Including self - temperature rise)
- Tested L: WK4237METER RDC:HK502BC METER Isat : WK3260B/ 3265B METER

Inductance vs. DC Current

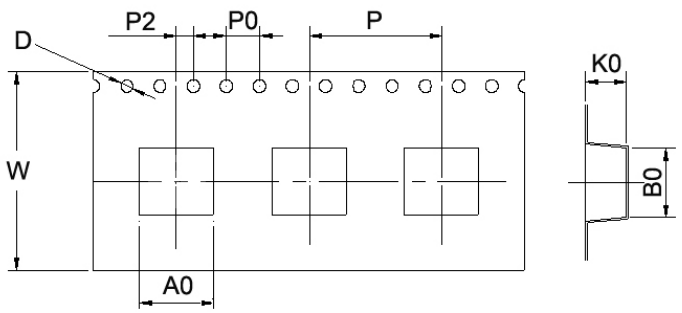


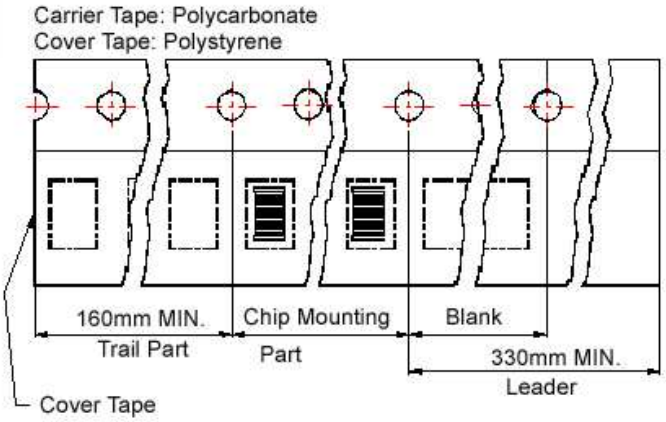
Temperature Change vs. DC Current



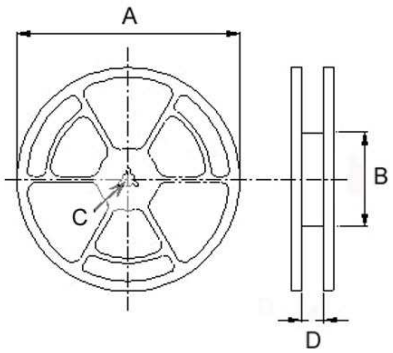
Packaging Specifications

Tape Dimensions





Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity
	A0	B0	K0	D	W	P	P0	P2	A	B	C	D	PCS / REEL
SFD100707	7.4	10.6	7.6	1.5	24	12	4	2	330	100	13.5	24	640
SFS100875	8.0	10.3	7.7	1.5	24	12	4	2	330	100	13.5	24	700