

SF Series

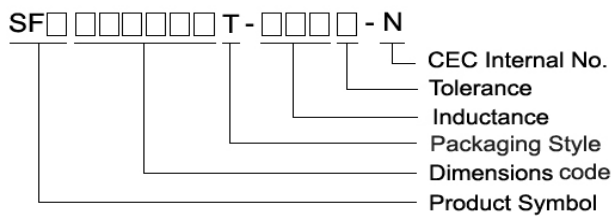
Features

- 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

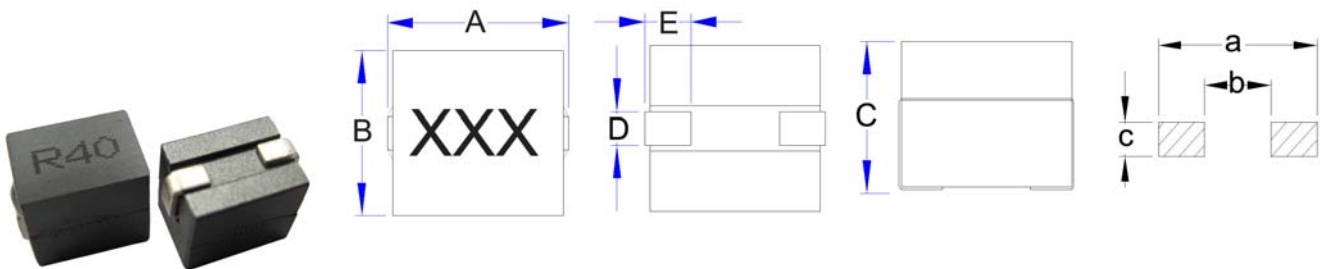
Applications

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

Product Identification



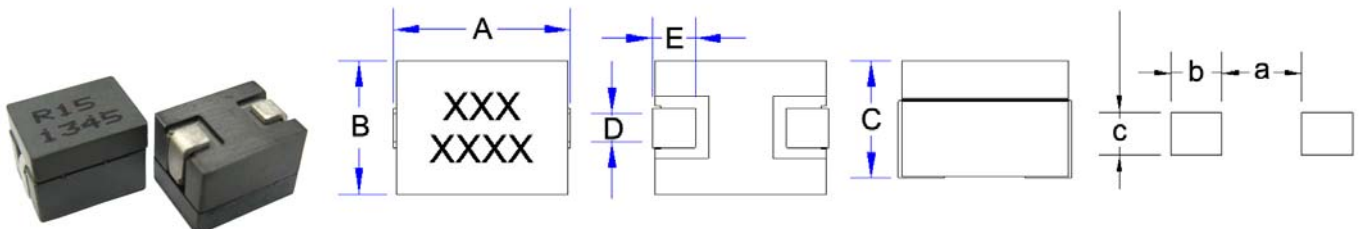
Shape and Dimensions



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

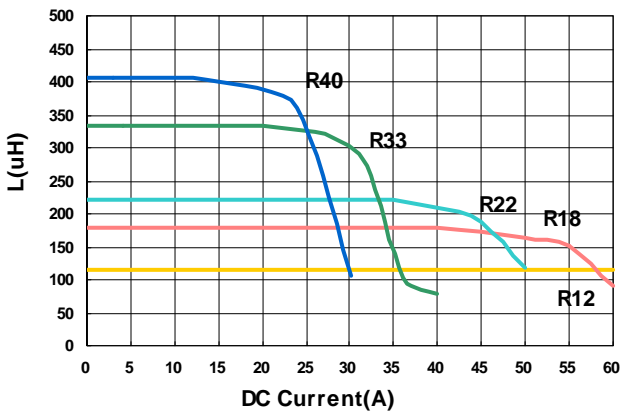
Electrical Characteristics

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

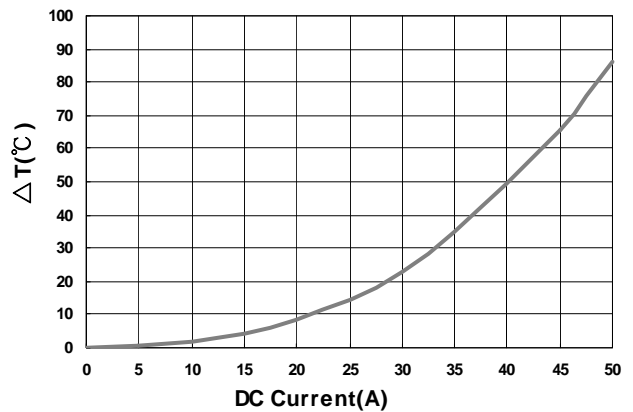
Note: When ordering, please specify tolerance code. Tolerance: L=±15%

- Customized Specifications are available
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- OCL (Open Circuit Inductance) Test parameters: 100kHz, 0.25Vrms, 0Adc & Isat @20°C
- DC current for an approximate ΔT of 40°C without core loss. Derating 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°C under worst case operating conditions verified in the end application.
- Measure Equipment :
 L : WK4237METER
 RDC : CHEN HWA 502
 Isat : WK3260B+WK3265B

Inductance vs. DC Current



Temperature Change vs. DC Current



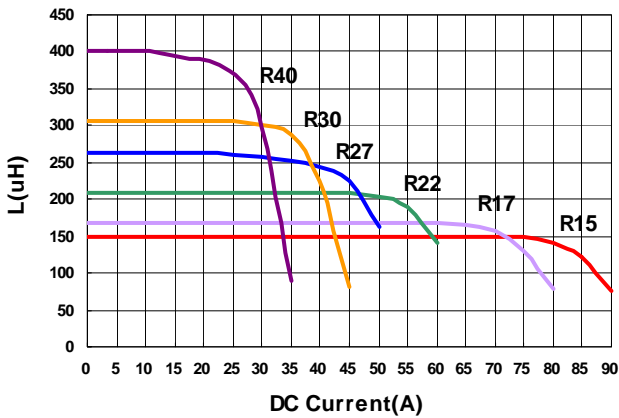
Electrical Characteristics

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

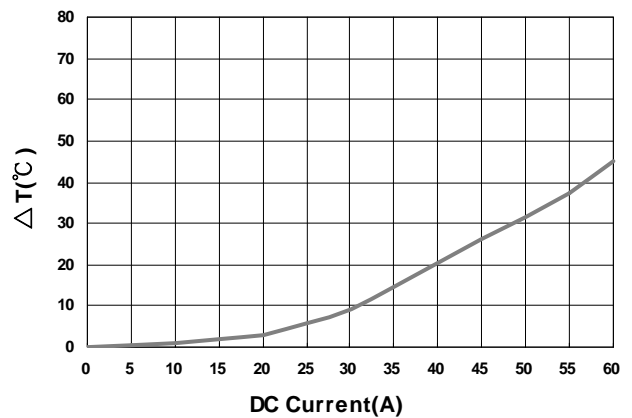
Note: When ordering, please specify tolerance code. Tolerance: K=±10%

- Customized Specifications are available
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- OCL (Open Circuit Inductance) Test parameters: 100kHz, 0.25Vrms, 0Adc & Isat @20°C
- DC current for an approximate ΔT of 40°C without core loss. Derating 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°C under worst case operating conditions verified in the end application.
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Inductance vs. DC Current

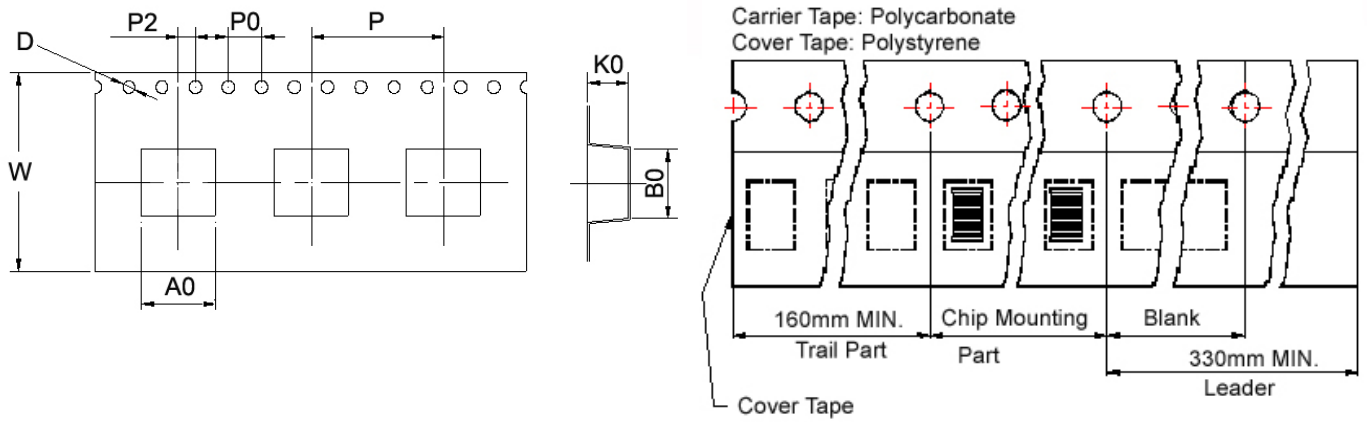


Temperature Change vs. DC Current

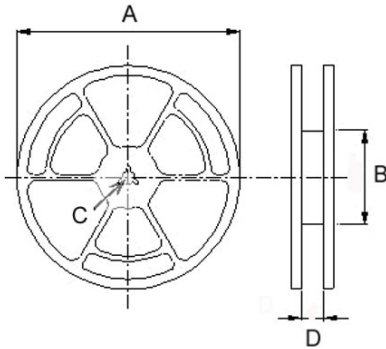


Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	W	P	P0	P2	A	B	C	D	
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