

Shielded SMD power Inductor

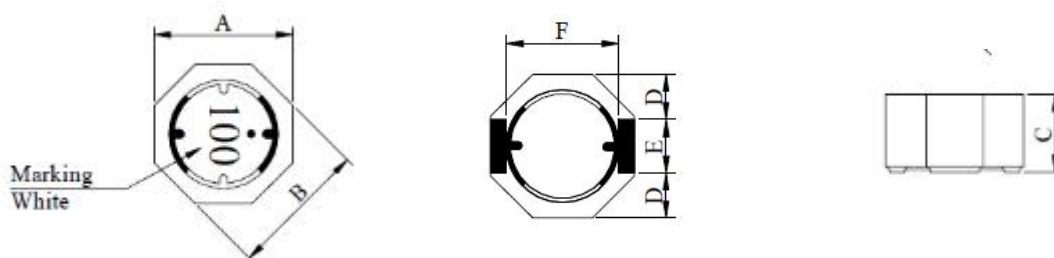
FC-SLU1028-L –FC-SLU1065-L-Series

Features

- Excellent solderability and high heat resistance.
- Low cost and packed in embossed carrier tape.
- Magnetic shielded surface mount inductor with high current rating
- Frequency Range: 100kHz, 0.1 Vrms
- Ambient temperature -40°C to $+105^{\circ}\text{C}$
- Storage temperature Component: -40°C to $+125^{\circ}\text{C}$

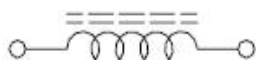


1. Dimensions:mm

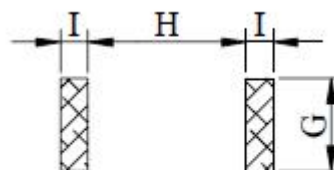


Series	A $\pm (0.3)$	B (± 0.30)	C (high)	D (typ)	E (typ)	F (typ)	G (REF)	H (REF)	I (REF)
FC-SLU1028-L	10.0	10.0	2.8 ± 0.3	3.4	3.2	4.7	4.0	7.2	1.8
FC-SLU1030-L	10.0	10.0	2.8 ± 0.3	3.0	4.0	8.2	4.2	8.2	1.5
FC-SLU1038-L	10.0	10.0	3.8 ± 0.3	3.4	3.2	7.4	4.0	7.2	1.8
FC-SLU1040-L	10.0	10.0	3.8 ± 0.3	3.0	4.0	8.2	4.2	8.2	1.4
FC-SLU1048-L	10.0	10.0	4.8 ± 0.3	3.4	3.2	7.4	4.0	7.2	1.80
FC-SLU1050-L	10.0	10.0	4.8 ± 0.3	3.0	4.0	8.2	4.2	8.2	1.4
FC-SLU1065-L	10.0	10.0	6.5 ± 0.3	3.0	4.0	8.2	4.2	8.2	1.4

2.Schematic:



3.LAYOUT RECOMMENDATION:mm



(PCB Pattern suggestion)

4. ELECTRIC CHARACTERICS

Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	I _{rms}	I _{sat}
FC-SLU1028-1R0YL	1.00± 30%	100	4.9	6.5	7.00	8.00
FC-SLU1028-1R5YL	1.50± 30%	80	7.3	1.0	6.50	6.50
FC-SLU1028-2R2YL	2.2± 30%	65	11.0	15.0	5.30	4.80
FC-SLU1028-3R3YL	3.30± 30%	55	15.0	20.0	4.60	4.30
FC-SLU1028-4R7YL	4.70± 30%	40	16.5	23.0	4.50	3.80
FC-SLU1028-6R8YL	6.80± 30%	30	25.0	33.0	3.50	3.00
FC-SLU1028-8R2YL	8.20± 30%	28	28.5	37.0	3.30	2.70
FC-SLU1028-100YL	10.00± 30%	25	40.0	53.0	2.80	2.40
FC-SLU1028-150YL	15.00± 30%	22	69.0	90.0	2.00	2.00
FC-SLU1028-220YL	22.00± 30%	16	104.0	135.0	1.60	1.40
FC-SLU1028-330YL	33.0± 30%	12	139.0	180.0	1.25	1.20
FC-SLU1028-470YL	47.00± 30%	11	167.0	230.0	1.30	1.10
FC-SLU1028-560YL	56.00± 30%	10	208.0	270.0	1.10	1.00
FC-SLU1028-680YL	68.00± 30%	9	232.0	300.	1.00	0.9
FC-SLU1028-820YL	82.00± 30%	8	323.0	420.0	0.90	0.85
FC-SLU1028-101YL	100.00± 30%	7	365.0	470.0	0.85	0.80
FC-SLU1028-121YL	120.00± 30%	6	428.0	560.0	0.65	0.70
FC-SLU1028-151YL	150.00± 30%	5	518.0	680.0	0.70	0.65

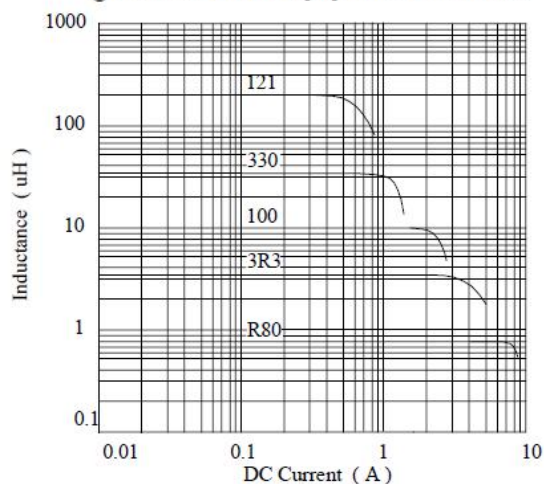
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

I_{rms} base on Temp. rise 40°C max.

I_{sat} base on Δ L / LOA=35% typ.

@ Inductance VS. DC Superposition Characteristics



FC- SLU1028-L-FC-SLU1065-L-Series Shielded SMD power Inductor

5. ELECTRIC CHARACTERICS

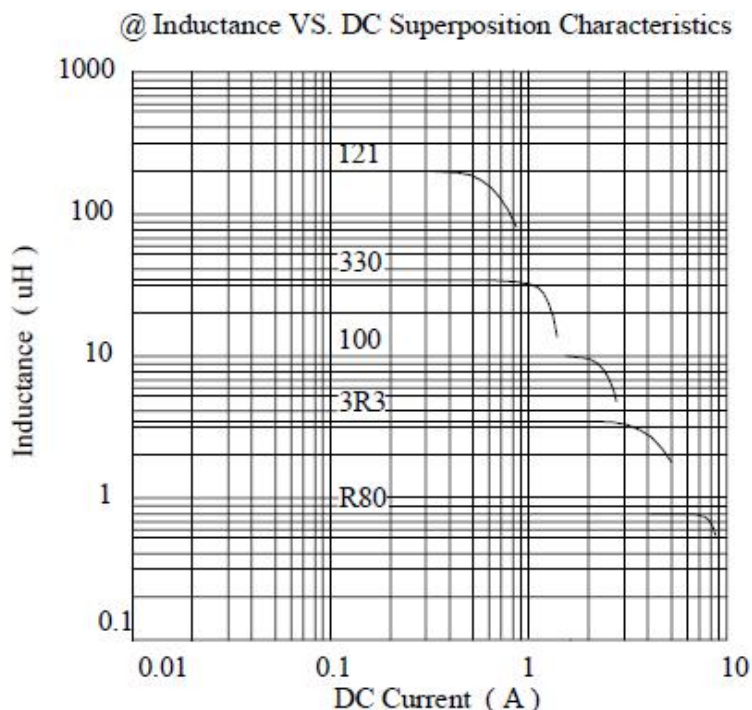
Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	I _{rms}	I _{sat}
FC-SLU1030-3R5YL	3.5± 30%	45	20.5	27.0	5.00	5.20
FC-SLU1030-4R7YL	4.7± 30%	36	25.0	32.5	4.20	4.40
FC-SLU1030-6R2YL	6.2± 30%	30	32.0	42.0	3.80	3.90
FC-SLU1030-100YL	10.0± 30%	26	44.0	58.0	3.00	3.10
FC-SLU1030-150YL	15.0± 30%	22	73.0	95.0	2.60	2.55
FC-SLU1030-220YL	22.0± 30%	18	110.0	145.0	2.00	2.10
FC-SLU1030-330YL	33.0± 30%	14	150.0	195.0	1.70	1.74
FC-SLU1030-470YL	47.0± 30%	12	210.0	270.0	1.40	1.35
FC-SLU1030-680YL	68.0± 30%	10	285.0	370.0	1.20	1.22
FC-SLU1030-101YL	100.± 30%	8.5	395.0	520.0	1.10	1.02
FC-SLU1030-151YL	150± 30%	5.5	640.0	840.0	0.85	0.84

Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

I_{rms} base on Temp. rise 40°C max.

I_{sat} base on Δ L / LOA=35% typ.



FC- SLU1028-L-FC-SLU1065-L-Series Shielded SMD power Inductor

6. ELECTRIC CHARACTERICS

Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	Irms	Isat
FC-SLU1038-1R5YL	1.5± 30%	65	5.2	7.5	7.20	7.00
FC-SLU1038-2R2YL	2.2± 30%	55	7.7	10.5	6.80	6.50
FC-SLU1038-3R5YL	3.5± 30%	35	11.5	15.0	5.50	5.50
FC-SLU1038-5R0YL	5.0± 30%	30	14.5	22.0	4.60	4.80
FC-SLU1038-6R2YL	6.2± 30%	25	16.5	24.0	4.00	4.20
FC-SLU1038-100YL	10.0± 30%	20	20.5	35.0	3.80	3.60
FC-SLU1038-150YL	15.0± 30%	16	37.0	50.0	2.80	2.70
FC-SLU1038-220YL	22.0± 30%	12	55.8	75.0	2.80	2.70
FC-SLU1038-330YL	33.0± 30%	10	86.0	112.0	1.80	1.80
FC-SLU1038-470YL	47.0± 30%	8	121.0	160.0	1.65	1.60
FC-SLU1038-680YL	68.0± 30%	7	166.0	216.0	1.10	1.30
FC-SLU1038-101YL	100.0± 30%	6	220.0	300.0	1.30	1.10
FC-SLU1038-151YL	150.0± 30%	5	358.0	476.0	0.90	0.80
FC-SLU1038-221YL	220.0± 30%	4	565.0	470.0	0.65	0.65
FC-SLU1038-331YL	330.0± 30%	3	773.0	1000.0	0.55	0.52

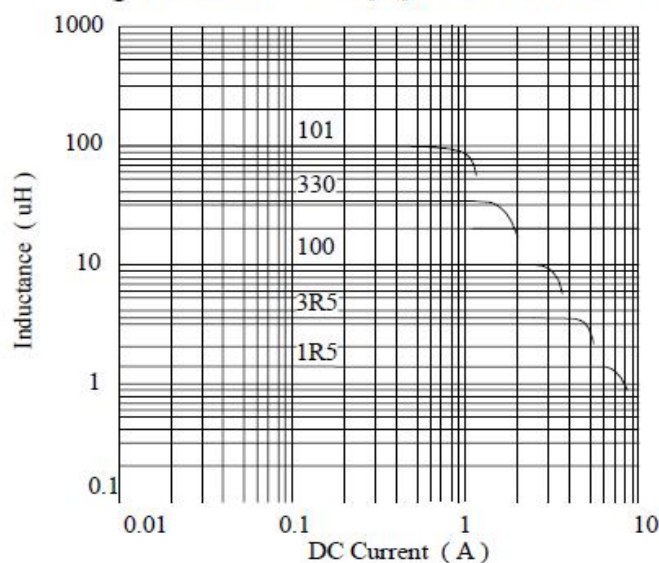
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

Irms base on Temp. rise 40°C max.

Isat base on $\Delta L / LOA=35\%$ typ.

@ Inductance VS. DC Superposition Characteristics



FC- SLU1028-L-FC-SLU1065-L-Series Shielded SMD power Inductor

7. ELECTRIC CHARACTERICS

Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	I _{rms}	I _{sat}
FC-SLU1040-3R8YL	3.8± 30%	40.0	13.5	18.0	6.60	5.80
FC-SLU1040-5R0YL	5.0± 30%	28.0	17.5	23.0	5.20	4.70
FC-SLU1040-6R2YL	6.2± 30%	24.0	21.5	28.0	4.70	4.30
FC-SLU1040-100YL	10.0± 30%	22.0	32.0	42.0	4.40	3.80
FC-SLU1040-150YL	15.0± 30%	16.0	60.0	78.0	2.90	2.80
FC-SLU1040-220YL	22.0± 30%	12.0	75.0	98.0	2.55	2.48
FC-SLU1040-330YL	33.0± 30%	10.0	110.0	140.0	2.05	2.00
FC-SLU1040-470YL	47.0± 30%	8.0	170.0	220.0	1.62	1.56
FC-SLU1040-680YL	68.0± 30%	7.0	245.0	320.0	1.45	1.40
FC-SLU1040-101YL	100.0± 30%	6.0	320.0	415.0	1.18	1.14
FC-SLU1040-221YL	220.0± 30%	4.0	760.0	950.0	0.78	0.72
FC-SLU1040-330YL	330.0± 30%	2.5	1080.0	1350.0	0.62	0.60

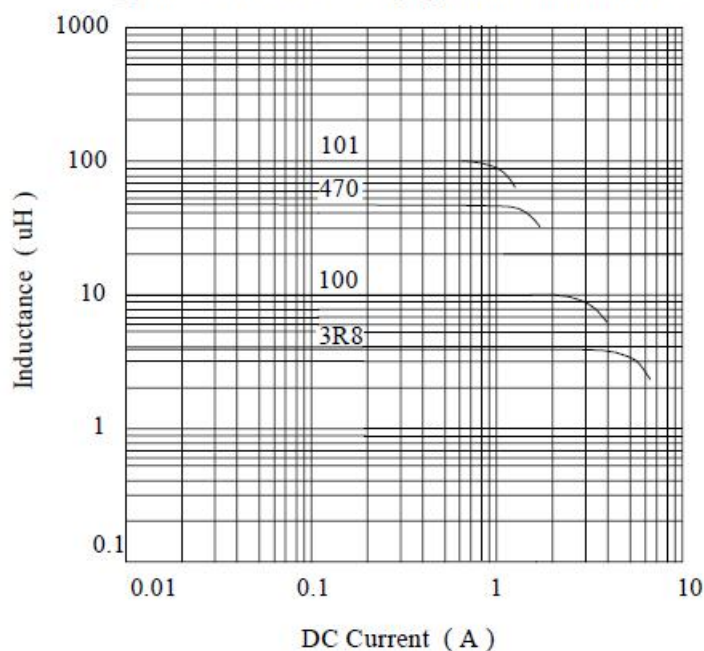
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

I_{rms} base on Temp. rise 40°C max.

I_{sat} base on Δ L / LOA=35% typ.

@ Inductance VS. DC Superposition Characteristics



8. ELECTRIC CHARACTERICS

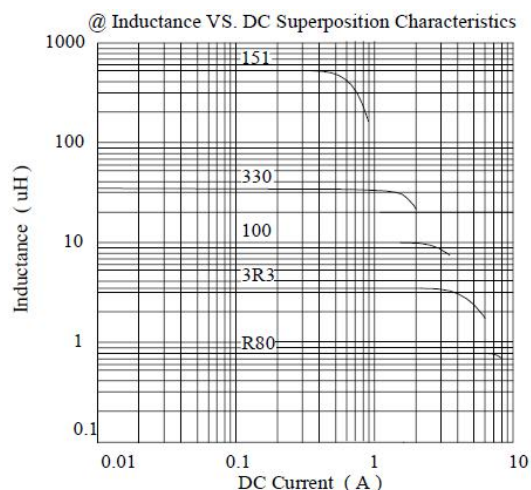
Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	I _{rms}	I _{sat}
FC-SLU1048-R80YL	0.8± 30%	100	3.6	4.8	7.80	8.50
FC-SLU1048-1R5YL	1.5± 30%	70	4.3	5.8	7.00	7.20
FC-SLU1048-2R2YL	2.2± 30%	55	5.3	7.2	6.50	6.30
FC-SLU1048-3R0YL	3.0± 30%	40	7.2	10.0	6.20	6.00
FC-SLU1048-4R7YL	4.7± 30%	30	9.5	12.5	5.50	4.75
FC-SLU1048-6R8YL	6.8± 30%	20	13.6	18.0	4.80	4.10
FC-SLU1048-8R2YL	8.2± 30%	18	15.0	20.0	4.60	3.80
FC-SLU1048-100YL	10.0± 30%	16	18.5	25.0	4.50	3.70
FC-SLU1048-150YL	15.0± 30%	14	29.0	40.0	3.20	2.70
FC-SLU1048-220YL	22.0± 30%	12	42.0	55.0	2.60	2.00
FC-SLU1048-330YL	33.0± 30%	10	63.0	84.0	2.10	1.70
FC-SLU1048-470YL	47.0± 30%	8	94.0	120.0	1.70	1.50
FC-SLU1048-560YL	56.0± 30%	7	110.0	145.0	1.60	1.40
FC-SLU1048-680YL	68.0± 30%	6	127.0	170.0	1.40	1.25
FC-SLU1048-820YL	82.0± 30%	5.5	149.0	200.0	1.30	1.10
FC-SLU1048-101YL	100.0± 30%	5	160.0	220.0	1.20	1.00
FC-SLU1048-151YL	150.0± 30%	4.5	235.0	305.0	1.00	0.80
FC-SLU1048-221YL	220.0± 30%	4	350.0	455.0	0.80	0.70
FC-SLU1048-330YL	330.0± 30%	3	490.0	640.0	0.60	0.52

Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

I_{rms} base on Temp. rise 40°C max.

I_{sat} base on Δ L / LOA=35% typ.



9. ELECTRIC CHARACTERICS

Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	Irms	Isat
FC-SLU1050-4R7YL	4.70± 30%	34.0	14.5	19.0	5.20	5.10
FC-SLU1050-100YL	10.00± 30%	20.0	26.0	34.0	4.40	3.80
FC-SLU1050-220YL	22.00± 30%	10.0	58.0	76.0	2.90	2.70
FC-SLU1050-330YL	33.00± 30%	8.5	70.0	90.0	2.70	2.10
FC-SLU1050-470YL	47.00± 30%	7.0	100.0	130.0	2.10	1.80
FC-SLU1050-680YL	68.00± 30%	6.5	144.0	186.0	1.75	1.45
FC-SLU1050-101YL	100.00± 30%	5.0	198.0	260.0	1.50	1.25
FC-SLU1050-151YL	150.00± 30%	4.0	330.0	430.0	1.15	1.05
FC-SLU1050-221YL	220.00± 30%	3.5	470.0	610.0	0.95	0.88
FC-SLU1050-331YL	330.00± 30%	2.5	690.0	900.0	0.84	0.70
FC-SLU1050-470YL	470.00± 30%	1.9	1050.0	1350.0	0.65	0.55
FC-SLU1050-681YL	680.00± 30%	1.6	1350.0	1760.0	0.56	0.48
FC-SLU1050-102YL	1000.00± 30%	1.4	2120.0	2760.0	0.47	0.40

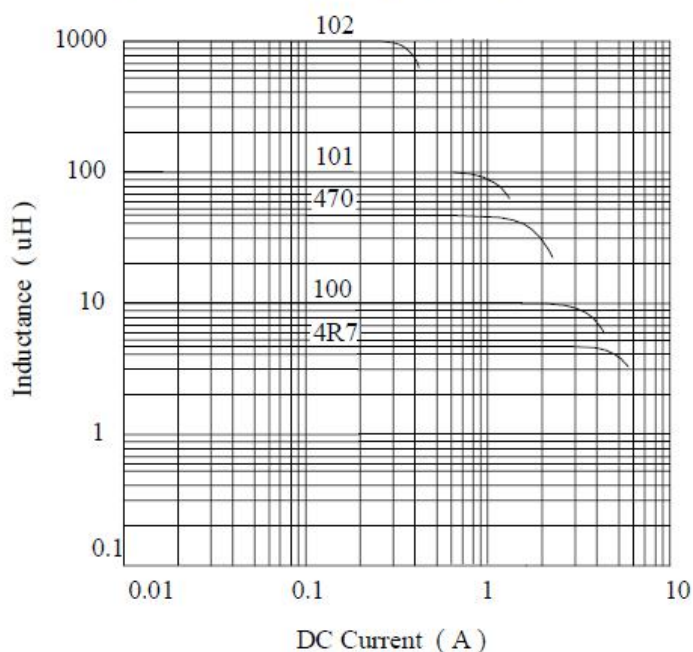
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

Irms base on Temp. rise 40°C max.

Isat base on $\Delta L / LOA=35\%$ typ.

@ Inductance VS. DC Superposition Characteristics



FC- SLU1028-L-FC-SLU1065-L-Series Shielded SMD power Inductor

10. ELECTRIC CHARACTERICS

Part Number	Inductance (uH)	SRF (MHZ)	RDC (mΩ)		Current Rating (A)	
			typ	max	I _{rms}	I _{sat}
FC-SLU1065-2R8YL	2.8± 30%	60	15.0	19.0	6.50	7.50
FC-SLU1065-4R2YL	4.2± 30%	45	18.0	23.0	5.60	7.00
FC-SLU1065-6R5YL	6.5± 30%	28	28.0	35.0	5.00	5.30
FC-SLU1065-100YL	10.0± 30%	20	33.0	41.0	4.90	4.00
FC-SLU1065-220YL	22.0± 30%	12	58.0	73.0	3.80	2.80
FC-SLU1065-330YL	33.0± 30%	7	93.0	120.0	2.70	2.40
FC-SLU1065-470YL	47.0± 30%	6	165.0	210.0	2.10	2.10
FC-SLU1065-680YL	68.0± 30%	5	195.0	250.0	1.85	1.75
FC-SLU1065--101YL	100.0± 30%	4	234.0	290.0	1.80	1.40

Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C .

Inductance Test Freq. : 100KHz /0.1V

I_{rms} base on Temp. rise 40°C max.

I_{sat} base on $\Delta L / LOA=35\%$ typ.

