

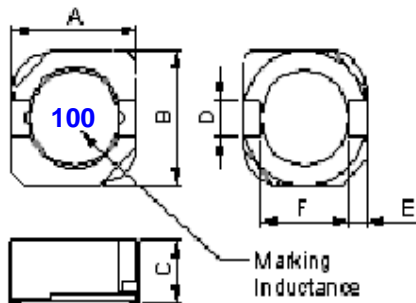
SMD Type Power Inductor **SDSL10D30F-SERIES**

1. Features

- 1.Low profile very effective in space-conscious applications.
- 2.Low resistance and high energy storage.
- 3.100% Lead(Pb) & Halogen-Free and RoHS compliant.



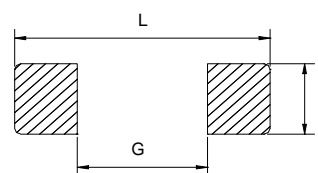
2. Dimension



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
SDSL10D30F	10.2±0.3	10.0±0.3	3.0 max.	3.0±0.1	1.2±0.15	7.7±0.3

Units: mm

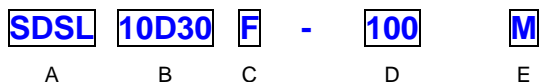
Recommended PC Board Pattern



SDSL	10D30F
L	10.5
G	7.3
H	3.2

Units: mm

3. Part Numbering



- A: Series
- B: Dimension
- C: Lead free type
- D: Inductance 100=10.0uH
- E: Inductance Tolerance M=±20%, Y=±30%

4. Specification

TAI-TECH Part Number	Inductance (μ H)	Test Frequency (Hz)	DCR (Ω) max.	I sat (A) max.	I rms (A) typ.
SDSL10D30F-R80Y	0.8 \pm 30%	0.1V/100K	0.0057	11.2	8.30
SDSL10D30F-1R5Y	1.5 \pm 30%	0.1V/100K	0.011	8.00	5.80
SDSL10D30F-2R2Y	2.2 \pm 30%	0.1V/100K	0.0169	6.70	5.10
SDSL10D30F-3R3Y	3.3 \pm 30%	0.1V/100K	0.021	5.56	4.70
SDSL10D30F-4R7Y	4.7 \pm 30%	0.1V/100K	0.030	4.65	4.00
SDSL10D30F-6R8Y	6.8 \pm 30%	0.1V/100K	0.035	3.84	3.60
SDSL10D30F-8R2Y	8.2 \pm 30%	0.1V/100K	0.050	3.54	3.00
SDSL10D30F-100M	10 \pm 20%	0.1V/100K	0.059	3.18	2.80
SDSL10D30F-150M	15 \pm 20%	0.1V/100K	0.091	2.60	2.05
SDSL10D30F-220M	22 \pm 20%	0.1V/100K	0.143	2.16	1.60
SDSL10D30F-330M	33 \pm 20%	0.1V/100K	0.202	1.74	1.35
SDSL10D30F-470M	47 \pm 20%	0.1V/100K	0.299	1.43	1.20
SDSL10D30F-560M	56 \pm 20%	0.1V/100K	0.325	1.36	1.15
SDSL10D30F-680M	68 \pm 20%	0.1V/100K	0.429	1.22	0.95
SDSL10D30F-820M	82 \pm 20%	0.1V/100K	0.494	1.14	0.80
SDSL10D30F-101M	100 \pm 20%	0.1V/100K	0.683	1.02	0.70
SDSL10D30F-121M	120 \pm 20%	0.1V/100K	0.754	0.89	0.65
SDSL10D30F-151M	150 \pm 20%	0.1V/100K	0.871	0.84	0.51

Note:

Isat : Based on inductance change ($\Delta L/L0 : \leq -35\%$) @ ambient temp. 25 $^{\circ}$ C

Irms : Based on temperature rise ($\Delta T : 40^{\circ}$ C typ.)

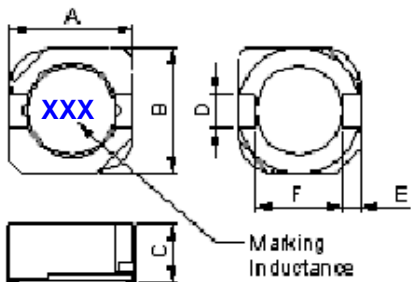
SMD Type Power Inductors SDSL10D40F-Series

1. Features

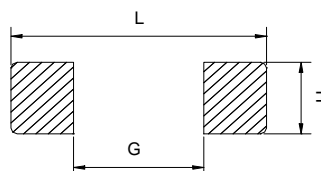
- 1.Low profile very effective in space-conscious applications.
- 2.Low resistance and high energy storage.
- 3.100% Lead(Pb) & Halogen-Free and RoHS compliant.



2. Dimension



Recommended PC Board Pattern



	SDSL10D40F
L	10.5
G	7.3
H	3.2

Units: mm

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
SDSL10D40F	10.2±0.3	10.0±0.3	3.8±0.2	3.0±0.1	1.2±0.15	7.7±0.3

Units: mm

3. Part Numbering



- A: Series
- B: Dimension
- C: Lead free type
- D: Inductance 1R5=1.50uH
- E: Inductance Tolerance M=±20%, Y=±30%

4. Specification

Part Number	Inductance (uH)	Test Frequency (Hz)	DCR (Ω) max.	I sat (A) max.	I rms (A) typ.
SDSL10D40F-1R5Y	1.5±30%	0.1V/100K	0.0081	10.0	6.50
SDSL10D40F-2R5Y	2.5±30%	0.1V/100K	0.0105	7.50	6.10
SDSL10D40F-3R8Y	3.8±30%	0.1V/100K	0.013	6.00	5.50
SDSL10D40F-5R2Y	5.2±30%	0.1V/100K	0.022	5.50	5.40
SDSL10D40F-6R8Y	6.8±30%	0.1V/100K	0.027	4.80	4.50
SDSL10D40F-7R0Y	7.0±30%	0.1V/100K	0.027	4.80	4.50
SDSL10D40F-100M	10±20%	0.1V/100K	0.035	4.40	3.80
SDSL10D40F-150M	15±20%	0.1V/100K	0.050	3.60	3.10
SDSL10D40F-220M	22±20%	0.1V/100K	0.073	2.90	2.50
SDSL10D40F-330M	33±20%	0.1V/100K	0.093	2.30	2.20
SDSL10D40F-470M	47±20%	0.1V/100K	0.155	2.10	1.90
SDSL10D40F-680M	68±20%	0.1V/100K	0.213	1.50	1.42
SDSL10D40F-101M	100±20%	0.1V/100K	0.304	1.35	1.25
SDSL10D40F-151M	150±20%	0.1V/100K	0.506	1.15	0.82
SDSL10D40F-221M	220±20%	0.1V/100K	0.756	0.92	0.70
SDSL10D40F-331M	330±20%	0.1V/100K	1.090	0.70	0.52

Note:

I_{sat} : Based on inductance change ($\Delta L/L0 : \leq -35\%$) @ ambient temp. 25°C

I_{rms} : Based on temperature rise ($\Delta T : 40^\circ\text{C}$ typ.)

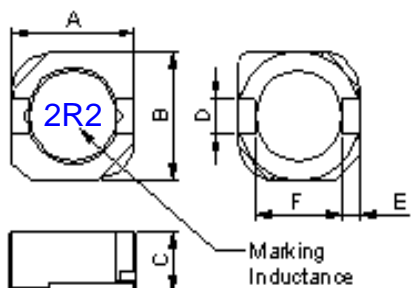
SMD Type Power Inductors

SDSL10D50F-Series

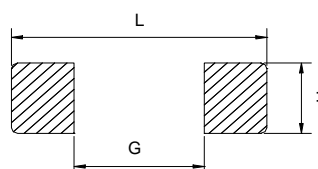
- 1.Low profile very effective in space-conscious applications.
- 2.Low resistance and high energy storage.
- 3.This component is compliant with RoHS legislation and also support lead-free soldering.



2.Dimension



Recommended PC Board Pattern



SDSL	10D50F
L	10.5
G	7.3
H	3.2

Units: mm

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
SDSL10D50F	10.5 max.	10.3 max.	5.0 max.	3.0 ref.	1.2±0.15	7.7±0.3

Units: mm

3. Part Numbering



- A: Series
- B: Dimension
- C: Lead Free Code
- D: Inductance 2R2=2.2uH
- E: Inductance Tolerance M=±20%, Y=±30%

4. Specification

TAI-TECH Part Number	Inductance (uH)	Test Frequency (Hz)	DCR (mΩ) max.	I sat (A) max.	I rms (A) typ.
SDSL10D50F-R80Y	0.8±30%	0.1V/100K	4.3	9.50	13.50
SDSL10D50F-1R5Y	1.5±30%	0.1V/100K	5.8	8.30	10.50
SDSL10D50F-2R2Y	2.2±30%	0.1V/100K	7.2	7.50	9.25
SDSL10D50F-3R3Y	3.3±30%	0.1V/100K	10.4	6.50	7.80
SDSL10D50F-4R7Y	4.7±30%	0.1V/100K	12.3	6.10	6.40
SDSL10D50F-6R8Y	6.8±30%	0.1V/100K	18.0	5.40	5.40
SDSL10D50F-8R2Y	8.2±30%	0.1V/100K	20.0	5.00	4.85
SDSL10D50F-100M	10±20%	0.1V/100K	26.0	4.50	4.45
SDSL10D50F-120M	12±20%	0.1V/100K	33.0	3.80	4.00
SDSL10D50F-150M	15±20%	0.1V/100K	41.0	3.40	3.60
SDSL10D50F-180M	18±20%	0.1V/100K	46.0	3.10	3.20
SDSL10D50F-220M	22±20%	0.1V/100K	61.0	2.90	2.95
SDSL10D50F-270M	27±20%	0.1V/100K	69.0	2.60	2.70
SDSL10D50F-330M	33±20%	0.1V/100K	84.0	2.50	2.40
SDSL10D50F-390M	39±20%	0.1V/100K	106.0	2.25	2.30
SDSL10D50F-470M	47±20%	0.1V/100K	130.0	2.00	2.00
SDSL10D50F-560M	56±20%	0.1V/100K	149.0	1.90	1.90
SDSL10D50F-680M	68±20%	0.1V/100K	201.0	1.60	1.65
SDSL10D50F-820M	82±20%	0.1V/100K	227.0	1.45	1.50
SDSL10D50F-101M	100±20%	0.1V/100K	253.0	1.35	1.35
SDSL10D50F-121M	120±20%	0.1V/100K	303.0	1.18	1.28
SDSL10D50F-151M	150±20%	0.1V/100K	370.0	1.10	1.12
SDSL10D50F-181M	180±20%	0.1V/100K	419.0	1.00	1.04
SDSL10D50F-221M	220±20%	0.1V/100K	500.0	0.94	0.94
SDSL10D50F-271M	270±20%	0.1V/100K	672.0	0.80	0.84
SDSL10D50F-331M	330±20%	0.1V/100K	812.0	0.73	0.75
SDSL10D50F-391M	390±20%	0.1V/100K	953.0	0.70	0.70
SDSL10D50F-471M	470±20%	0.1V/100K	1289.0	0.54	0.60
SDSL10D50F-561M	560±20%	0.1V/100K	1430.0	0.52	0.54
SDSL10D50F-681M	680±20%	0.1V/100K	1599.0	0.51	0.52
SDSL10D50F-821M	820±20%	0.1V/100K	1768.0	0.48	0.50
SDSL10D50F-102M	1000±20%	0.1V/100K	1989.0	0.42	0.48

Note:

Isat : Based on inductance change ($\Delta L/L0 : \leq -35\%$) @ ambient temp. 25°C

Irms : Based on temperature rise ($\Delta T : 40^\circ\text{C}$ typ.)