

## Surface Mount Shielded Power Inductors SCL Series (表面接著型閉磁式功率電感-----SCL 系列)



### ●Features(特徵):

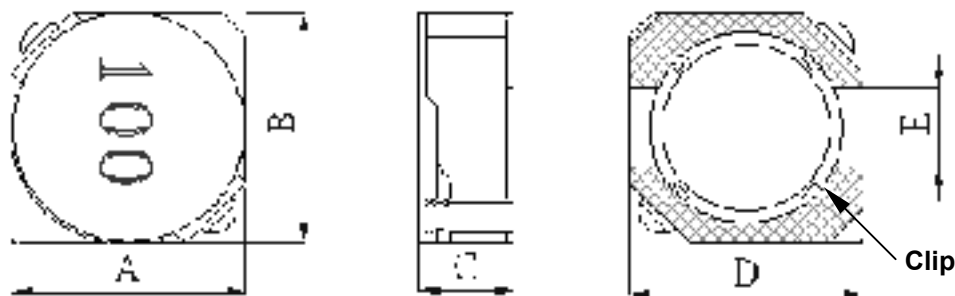
- 1, To be high saturation for surface mounting.(飽和特性佳。)
- 2, Surface mount inductor with high current rating.( 表面黏著型式且具高額定電流之電感。)
- 3.Low resistance to keep power loss minimum.(低電阻使功率損失降至最低。)
- 4, Packed in embossed carrier tape and can be used by automatic mounting machine.( 捲軸包裝，可用於自動插件機器。)

### ●Applications(應用):

LCD driving circuits (DC-DC converters) such as notebook-sized personal computers, portable terminal equipment, game units.

液晶顯示器驅動電路(直流-直流轉換器)例如象筆記型電腦、個人電腦、便攜式終端設備、遊戲卡等類型的產品。

### ●Shape & Dimensions(外觀呎吋):



Series	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SCL4D18	5.00 Max	5.00 Max	2.00 Max	4.60 Typ.	1.50 Typ.
SCL4D28	5.00 Max	5.00 Max	3.00 Max	4.60 Typ.	1.50 Typ.
SCL5D18	6.00 Max	6.00 Max	2.00 Max	5.60 Typ.	2.00 Typ.
SCL5D28	6.00 Max	6.00 Max	3.00 Max	5.60 Typ.	2.00 Typ.
SCL6D28	7.00 Max	7.00 Max	3.00 Max	6.60 Typ.	2.00 Typ.
SCL6D38	7.00 Max	7.00 Max	4.00 Max	6.60 Typ.	2.00 Typ.

### ●Specification(規格):

#### ◆SCL4D18 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL4D18-1R0Y	1.0 $\pm$ 30%	100KHz/0.1V	0.045	1.72
SCL4D18-2R2Y	2.2 $\pm$ 30%	100KHz/0.1V	0.075	1.32
SCL4D18-2R7Y	2.7 $\pm$ 30%	100KHz/0.1V	0.105	1.28
SCL4D18-3R3Y	3.3 $\pm$ 30%	100KHz/0.1V	0.110	1.04
SCL4D18-3R9Y	3.9 $\pm$ 30%	100KHz/0.1V	0.155	0.88
SCL4D18-4R7Y	4.7 $\pm$ 30%	100KHz/0.1V	0.162	0.84
SCL4D18-5R6Y	5.6 $\pm$ 30%	100KHz/0.1V	0.170	0.80
SCL4D18-6R8Y	6.8 $\pm$ 30%	100KHz/0.1V	0.200	0.76
SCL4D18-8R2Y	8.2 $\pm$ 30%	100KHz/0.1V	0.245	0.68
SCL4D18-100Y	10 $\pm$ 30%	100KHz/0.1V	0.200	0.61
SCL4D18-120Y	12 $\pm$ 30%	100KHz/0.1V	0.210	0.56
SCL4D18-150Y	15 $\pm$ 30%	100KHz/0.1V	0.240	0.50
SCL4D18-180Y	18 $\pm$ 30%	100KHz/0.1V	0.338	0.48
SCL4D18-220Y	22 $\pm$ 30%	100KHz/0.1V	0.397	0.41

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Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL4D18-270Y	27 $\pm$ 30%	100KHz/0.1V	0.441	0.35
SCL4D18-330Y	33 $\pm$ 30%	100KHz/0.1V	0.694	0.32
SCL4D18-390Y	39 $\pm$ 30%	100KHz/0.1V	0.709	0.30
SCL4D18-470Y	47 $\pm$ 30%	100KHz/0.1V	0.922	0.28
SCL4D18-560Y	56 $\pm$ 30%	100KHz/0.1V	1.080	0.26
SCL4D18-680Y	68 $\pm$ 30%	100KHz/0.1V	1.300	0.24
SCL4D18-820Y	82 $\pm$ 30%	100KHz/0.1V	1.550	0.22
SCL4D18-101Y	100 $\pm$ 30%	100KHz/0.1V	1.730	0.20
SCL4D18-121M	120 $\pm$ 20%	100KHz/0.1V	2.390	0.18
SCL4D18-151M	150 $\pm$ 20%	100KHz/0.1V	2.670	0.15
SCL4D18-181M	180 $\pm$ 20%	100KHz/0.1V	4.000	0.14

### ◆SCL4D28 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL4D28-1R2Y	1.2 $\pm$ 30%	100KHz/0.1V	0.024	2.56
SCL4D28-1R8Y	1.8 $\pm$ 30%	100KHz/0.1V	0.028	2.20
SCL4D28-2R2Y	2.2 $\pm$ 30%	100KHz/0.1V	0.031	2.04
SCL4D28-2R7Y	2.7 $\pm$ 30%	100KHz/0.1V	0.043	1.60
SCL4D28-3R3Y	3.3 $\pm$ 30%	100KHz/0.1V	0.049	1.57
SCL4D28-3R9Y	3.9 $\pm$ 30%	100KHz/0.1V	0.065	1.44
SCL4D28-4R7Y	4.7 $\pm$ 30%	100KHz/0.1V	0.072	1.32
SCL4D28-5R6Y	5.6 $\pm$ 30%	100KHz/0.1V	0.101	1.17
SCL4D28-6R8Y	6.8 $\pm$ 30%	100KHz/0.1V	0.109	1.12
SCL4D28-8R2Y	8.2 $\pm$ 30%	100KHz/0.1V	0.118	1.04
SCL4D28-100Y	10 $\pm$ 30%	100KHz/0.1V	0.128	1.00
SCL4D28-120Y	12 $\pm$ 30%	100KHz/0.1V	0.132	0.84
SCL4D28-150Y	15 $\pm$ 30%	100KHz/0.1V	0.149	0.76
SCL4D28-180Y	18 $\pm$ 30%	100KHz/0.1V	0.166	0.72
SCL4D28-220Y	22 $\pm$ 30%	100KHz/0.1V	0.235	0.70
SCL4D28-270Y	27 $\pm$ 30%	100KHz/0.1V	0.261	0.58
SCL4D28-330Y	33 $\pm$ 30%	100KHz/0.1V	0.378	0.56
SCL4D28-390Y	39 $\pm$ 30%	100KHz/0.1V	0.384	0.50
SCL4D28-680Y	68 $\pm$ 30%	100KHz/0.1V	0.699	0.35
SCL4D28-820Y	82 $\pm$ 30%	100KHz/0.1V	0.915	0.32
SCL4D28-101Y	100 $\pm$ 30%	100KHz/0.1V	1.020	0.29
SCL4D28-121M	120 $\pm$ 20%	100KHz/0.1V	1.270	0.27
SCL4D28-151M	150 $\pm$ 20%	100KHz/0.1V	1.350	0.24
SCL4D28-181M	180 $\pm$ 20%	100KHz/0.1V	1.540	0.22
SCL4D28-221M	220 $\pm$ 20%	100KHz/0.1V	1.720	0.20
SCL4D28-271M	270 $\pm$ 20%	100KHz/0.1V	1.950	0.16
SCL4D28-331M	330 $\pm$ 20%	100KHz/0.1V	2.660	0.14
SCL4D28-391M	390 $\pm$ 20%	100KHz/0.1V	2.830	0.13

### ◆SCL5D18 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL5D18-4R1Y	4.1 $\pm$ 30%	10KHz/0.1V	0.057	1.95
SCL5D18-5R4Y	5.4 $\pm$ 30%	10KHz/0.1V	0.076	1.60
SCL5D18-6R2Y	6.2 $\pm$ 30%	10KHz/0.1V	0.096	1.40
SCL5D18-8R9Y	8.9 $\pm$ 30%	10KHz/0.1V	0.116	1.25
SCL5D18-100Y	10 $\pm$ 30%	10KHz/0.1V	0.124	1.20
SCL5D18-120Y	12 $\pm$ 30%	10KHz/0.1V	0.153	1.10

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### ◆SCL5D18 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL5D18-150Y	15 $\pm$ 30%	10KHz/0.1V	0.196	0.97
SCL5D18-180Y	18 $\pm$ 30%	10KHz/0.1V	0.210	0.85
SCL5D18-220Y	22 $\pm$ 30%	10KHz/0.1V	0.290	0.80
SCL5D18-270Y	27 $\pm$ 30%	10KHz/0.1V	0.330	0.75
SCL5D18-330Y	33 $\pm$ 30%	10KHz/0.1V	0.386	0.65
SCL5D18-390Y	39 $\pm$ 30%	10KHz/0.1V	0.520	0.57
SCL5D18-470Y	47 $\pm$ 30%	10KHz/0.1V	0.595	0.54
SCL5D18-560Y	56 $\pm$ 30%	10KHz/0.1V	0.665	0.50
SCL5D18-680Y	68 $\pm$ 30%	10KHz/0.1V	0.840	0.43
SCL5D18-820Y	82 $\pm$ 30%	10KHz/0.1V	0.978	0.41
SCL5D18-101Y	100 $\pm$ 30%	10KHz/0.1V	1.200	0.36
SCL5D18-121M	120 $\pm$ 20%	10KHz/0.1V	1.500	0.33
SCL5D18-151M	150 $\pm$ 20%	10KHz/0.1V	1.710	0.31
SCL5D18-181M	180 $\pm$ 20%	10KHz/0.1V	2.240	0.28
SCL5D18-221M	220 $\pm$ 20%	10KHz/0.1V	2.440	0.23
SCL5D18-331M	330 $\pm$ 20%	10KHz/0.1V	4.340	0.18

### ◆SCL5D28 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL5D28-2R6Y	2.6 $\pm$ 30%	10KHz/0.1V	0.018	2.60
SCL5D28-3R0Y	3.0 $\pm$ 30%	10KHz/0.1V	0.024	2.40
SCL5D28-4R2Y	4.2 $\pm$ 30%	10KHz/0.1V	0.031	2.20
SCL5D28-5R3Y	5.3 $\pm$ 30%	10KHz/0.1V	0.038	1.90
SCL5D28-6R2Y	6.2 $\pm$ 30%	10KHz/0.1V	0.045	1.80
SCL5D28-8R2Y	8.2 $\pm$ 30%	10KHz/0.1V	0.053	1.60
SCL5D28-100Y	10 $\pm$ 30%	10KHz/0.1V	0.065	1.30
SCL5D28-120Y	12 $\pm$ 30%	10KHz/0.1V	0.076	1.20
SCL5D28-150Y	15 $\pm$ 30%	10KHz/0.1V	0.103	1.10
SCL5D28-180Y	18 $\pm$ 30%	10KHz/0.1V	0.110	1.00
SCL5D28-220Y	22 $\pm$ 30%	10KHz/0.1V	0.122	0.90
SCL5D28-270Y	27 $\pm$ 30%	10KHz/0.1V	0.175	0.85
SCL5D28-330Y	33 $\pm$ 30%	10KHz/0.1V	0.189	0.75
SCL5D28-390Y	39 $\pm$ 30%	10KHz/0.1V	0.212	0.70
SCL5D28-470Y	47 $\pm$ 30%	10KHz/0.1V	0.260	0.62
SCL5D28-560Y	56 $\pm$ 30%	10KHz/0.1V	0.305	0.58
SCL5D28-680Y	68 $\pm$ 30%	10KHz/0.1V	0.355	0.52
SCL5D28-820Y	82 $\pm$ 30%	10KHz/0.1V	0.463	0.46
SCL5D28-101Y	100 $\pm$ 30%	10KHz/0.1V	0.520	0.42
SCL5D28-121M	120 $\pm$ 20%	10KHz/0.1V	0.560	0.40
SCL5D28-151M	150 $\pm$ 20%	10KHz/0.1V	0.680	0.35
SCL5D28-181M	180 $\pm$ 20%	10KHz/0.1V	0.930	0.32
SCL5D28-221M	220 $\pm$ 20%	10KHz/0.1V	1.150	0.30
SCL5D28-271M	270 $\pm$ 20%	10KHz/0.1V	1.560	0.27
SCL5D28-331M	330 $\pm$ 20%	10KHz/0.1V	1.980	0.25
SCL5D28-391M	390 $\pm$ 20%	10KHz/0.1V	2.500	0.22
SCL5D28-471M	470 $\pm$ 20%	10KHz/0.1V	2.700	0.20
SCL5D28-561M	560 $\pm$ 20%	10KHz/0.1V	3.120	0.18
SCL5D28-681M	680 $\pm$ 20%	10KHz/0.1V	4.150	0.16

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### ◆SCL6D28 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL6D28-3R0Y	3.0 $\pm$ 30%	10KHz/0.1V	0.024	3.00
SCL6D28-3R9Y	3.9 $\pm$ 30%	10KHz/0.1V	0.027	2.60
SCL6D28-5R0Y	5.0 $\pm$ 30%	10KHz/0.1V	0.031	2.40
SCL6D28-6R0Y	6.0 $\pm$ 30%	10KHz/0.1V	0.035	2.25
SCL6D28-7R3Y	7.3 $\pm$ 30%	10KHz/0.1V	0.054	2.10
SCL6D28-8R6Y	8.6 $\pm$ 30%	10KHz/0.1V	0.058	1.85
SCL6D28-100Y	10 $\pm$ 30%	10KHz/0.1V	0.065	1.70
SCL6D28-120Y	12 $\pm$ 30%	10KHz/0.1V	0.070	1.55
SCL6D28-150Y	15 $\pm$ 30%	10KHz/0.1V	0.084	1.40
SCL6D28-180Y	18 $\pm$ 30%	10KHz/0.1V	0.095	1.32
SCL6D28-220Y	22 $\pm$ 30%	10KHz/0.1V	0.128	1.20
SCL6D28-270Y	27 $\pm$ 30%	10KHz/0.1V	0.142	1.05
SCL6D28-330Y	33 $\pm$ 30%	10KHz/0.1V	0.165	0.97
SCL6D28-390Y	39 $\pm$ 30%	10KHz/0.1V	0.210	0.86
SCL6D28-470Y	47 $\pm$ 30%	10KHz/0.1V	0.238	0.80
SCL6D28-560Y	56 $\pm$ 30%	10KHz/0.1V	0.277	0.73
SCL6D28-680Y	68 $\pm$ 30%	10KHz/0.1V	0.304	0.65
SCL6D28-820Y	82 $\pm$ 30%	10KHz/0.1V	0.390	0.60
SCL6D28-101Y	100 $\pm$ 30%	10KHz/0.1V	0.535	0.54
SCL6D28-121M	120 $\pm$ 20%	10KHz/0.1V	0.750	0.51
SCL6D28-151M	150 $\pm$ 20%	10KHz/0.1V	0.950	0.47
SCL6D28-181M	180 $\pm$ 20%	10KHz/0.1V	1.200	0.41
SCL6D28-221M	220 $\pm$ 20%	10KHz/0.1V	1.500	0.37
SCL6D28-271M	270 $\pm$ 20%	10KHz/0.1V	1.700	0.33
SCL6D28-331M	330 $\pm$ 20%	10KHz/0.1V	2.150	0.28
SCL6D28-391M	390 $\pm$ 20%	10KHz/0.1V	2.250	0.27
SCL6D28-471M	470 $\pm$ 20%	10KHz/0.1V	3.150	0.21
SCL6D28-561M	560 $\pm$ 20%	10KHz/0.1V	3.750	0.20
SCL6D28-681M	680 $\pm$ 20%	10KHz/0.1V	5.150	0.20

### ◆SCL6D38 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL6D38-3R3Y	3.3 $\pm$ 30%	10KHz/0.1V	0.020	3.50
SCL6D38-5R0Y	5.0 $\pm$ 30%	10KHz/0.1V	0.024	2.90
SCL6D38-6R2Y	6.2 $\pm$ 30%	10KHz/0.1V	0.027	2.50
SCL6D38-7R4Y	7.4 $\pm$ 30%	10KHz/0.1V	0.031	2.30
SCL6D38-8R7Y	8.7 $\pm$ 30%	10KHz/0.1V	0.034	2.20

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### ◆SCL6D38 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
SCL6D38-100Y	10 $\pm$ 30%	10KHz/0.1V	0.038	2.00
SCL6D38-120Y	12 $\pm$ 30%	10KHz/0.1V	0.053	1.70
SCL6D38-150Y	15 $\pm$ 30%	10KHz/0.1V	0.057	1.60
SCL6D38-180Y	18 $\pm$ 30%	10KHz/0.1V	0.092	1.50
SCL6D38-220Y	22 $\pm$ 30%	10KHz/0.1V	0.096	1.30
SCL6D38-270Y	27 $\pm$ 30%	10KHz/0.1V	0.109	1.20
SCL6D38-330Y	33 $\pm$ 30%	10KHz/0.1V	0.124	1.10
SCL6D38-390Y	39 $\pm$ 30%	10KHz/0.1V	0.138	1.00
SCL6D38-470Y	47 $\pm$ 30%	10KHz/0.1V	0.155	0.95
SCL6D38-560Y	56 $\pm$ 30%	10KHz/0.1V	0.202	0.85
SCL6D38-680Y	68 $\pm$ 30%	10KHz/0.1V	0.234	0.75
SCL6D38-820Y	82 $\pm$ 30%	10KHz/0.1V	0.324	0.70
SCL6D38-101Y	100 $\pm$ 30%	10KHz/0.1V	0.358	0.65
SCL6D38-121M	120 $\pm$ 20%	10KHz/0.1V	0.470	0.59
SCL6D38-151M	150 $\pm$ 20%	10KHz/0.1V	0.580	0.54
SCL6D38-181M	180 $\pm$ 20%	10KHz/0.1V	0.690	0.49
SCL6D38-221M	220 $\pm$ 20%	10KHz/0.1V	0.890	0.43
SCL6D38-271M	270 $\pm$ 20%	10KHz/0.1V	1.290	0.40
SCL6D38-331M	330 $\pm$ 20%	10KHz/0.1V	1.700	0.37
SCL6D38-391M	390 $\pm$ 20%	10KHz/0.1V	1.750	0.34
SCL6D38-471M	470 $\pm$ 20%	10KHz/0.1V	2.200	0.32
SCL6D38-561M	560 $\pm$ 20%	10KHz/0.1V	2.850	0.29
SCL6D38-681M	680 $\pm$ 20%	10KHz/0.1V	3.200	0.25
SCL6D38-821M	820 $\pm$ 20%	10KHz/0.1V	4.050	0.22
SCL6D38-102M	1000 $\pm$ 20%	10KHz/0.1V	5.700	0.20

### ●Note:

- (1) Inductance is measured by LCR-meter 4284A(HP) or equivalent.
- (2) DC Resistance is measured by HP4338B Milliohms Meter or equivalent.
- (3) Rated current is measured by LCR-meter 3260B (WK) & DC Bias 3265B(WK).
- (4) Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the initial value of inductance has fallen by 35%, whichever is smaller.
- (5) Operating temperature -55°C ~ +125°C.
- (6) All test data is referenced to 25°C ambient.