



SMD Power chokes- SCD-F Series

SCD series Unshielded Inductors for low power loss Use

Features

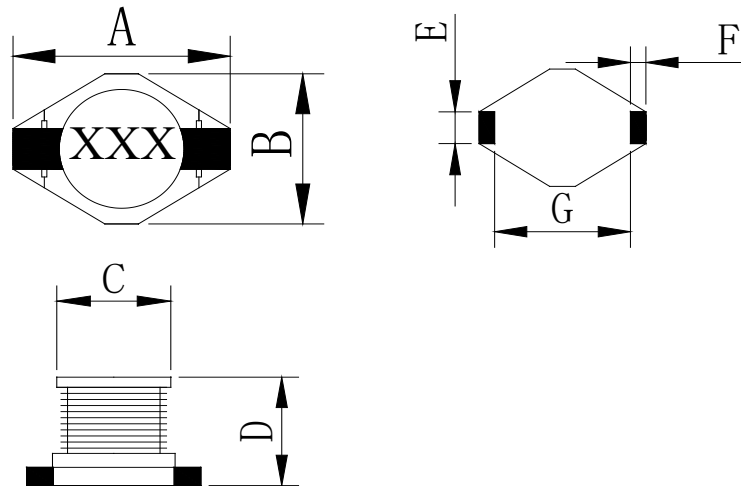
Various high power inductors are superior to be high saturation for surface mounting.



Applications

Power supply for VTR,OA equipment,
LCD television set,notebook PC,
portable communication,equipments,
DC/DC converters,etc.

Dimensions (mm)



Product Identification

SCD 1608F – 100 M -PF

SCD: SERIES NAME

1608:Dimensions CODE

F: CORE TYPE

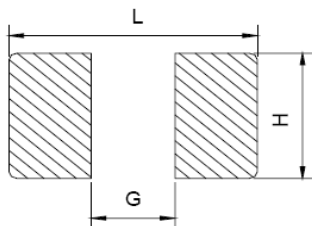
100: INDUCTANCE CODE.

M: TOLERANCE, K=10% M=20%.

PF:Pb-Free

| SERIES | A | B | C | D | E | F | G |
|----------|----------|----------|---------|----------|---------|---------|---------|
| SCD1608F | 6.6MAX | 4.45MAX | 3.94REF | 2.92MAX | 1.27REF | 1.02REF | 4.32REF |
| SCD3308F | 13.5MAX | 9.9MAX | 8.38REF | 3.0MAX | 2.54REF | 2.54REF | 7.2REF |
| SCD3316F | 13.5MAX | 9.9MAX | 8.38REF | 5.21MAX | 2.54REF | 2.54REF | 7.2REF |
| SCD3326F | 13.5MAX | 9.9MAX | 8.7MAX | 8.0MAX | 2.54REF | 2.54REF | 7.2REF |
| SCD3340F | 13.5MAX | 9.9MAX | 8.38REF | 11.43MAX | 2.54REF | 2.54REF | 7.2REF |
| SCD5022F | 19.04MAX | 15.74MAX | 12.7REF | 7.11MAX | 2.54REF | 2.54REF | 12.7REF |
| SCD5040F | 19.04MAX | 15.74MAX | 12.7REF | 11.43MAX | 2.54REF | 2.54REF | 12.7REF |

RECOMMENDER P.C.B LAYOUT



| SERIES | L | H | G |
|----------|-------|------|-------|
| SCD1608F | 6.86 | 3.56 | 4.06 |
| SCD3308F | 13.50 | 3.00 | 7.00 |
| SCD3316F | 13.50 | 3.00 | 7.00 |
| SCD3326F | 13.50 | 3.00 | 7.00 |
| SCD3340F | 13.50 | 3.00 | 7.00 |
| SCD5022F | 19.10 | 3.50 | 12.20 |
| SCD5040F | 19.10 | 3.50 | 12.20 |



SMD Power chokes- SCD-F Series

Electrical Characteristics

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DC Resistance (Ω Max) | I rms (A) typ. | I sat (A) typ. |
|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD1608F-1R0□-PF | 1.0 | 100KHz | 0.05 | 2.90 | 2.90 |
| SCD1608F-1R5□-PF | 1.5 | 100KHz | 0.05 | 2.60 | 2.80 |
| SCD1608F-2R2□-PF | 2.2 | 100KHz | 0.07 | 2.30 | 2.40 |
| SCD1608F-3R3□-PF | 3.3 | 100KHz | 0.08 | 2.00 | 2.00 |
| SCD1608F-4R7□-PF | 4.7 | 100KHz | 0.09 | 1.50 | 1.80 |
| SCD1608F-6R8□-PF | 6.8 | 100KHz | 0.13 | 1.20 | 1.50 |
| SCD1608F-100□-PF | 10 | 100KHz | 0.16 | 1.10 | 1.30 |
| SCD1608F-150□-PF | 15 | 100KHz | 0.26 | 0.90 | 0.92 |
| SCD1608F-220□-PF | 22 | 100KHz | 0.37 | 0.70 | 0.86 |
| SCD1608F-270□-PF | 27 | 100KHz | 0.44 | 0.65 | 0.80 |
| SCD1608F-330□-PF | 33 | 100KHz | 0.51 | 0.58 | 0.72 |
| SCD1608F-470□-PF | 47 | 100KHz | 0.75 | 0.50 | 0.56 |
| SCD1608F-680□-PF | 68 | 100KHz | 1.10 | 0.40 | 0.48 |
| SCD1608F-101□-PF | 100 | 100KHz | 1.56 | 0.31 | 0.40 |
| SCD1608F-151□-PF | 150 | 100KHz | 2.40 | 0.27 | 0.33 |
| SCD1608F-221□-PF | 220 | 100KHz | 3.60 | 0.22 | 0.27 |
| SCD1608F-331□-PF | 330 | 100KHz | 5.80 | 0.18 | 0.20 |
| SCD1608F-471□-PF | 470 | 100KHz | 7.25 | 0.16 | 0.18 |
| SCD1608F-681□-PF | 680 | 100KHz | 12.00 | 0.14 | 0.15 |
| SCD1608F-102□-PF | 1000 | 100KHz | 20.20 | 0.10 | 0.12 |

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-55°C to +105°C.
- (3). DC current(A)that will cause an approximate Δ T of 40°C.
- (4). DC current(A)that will cause Lo to drop approximately 10%.
- (5). □Tolerance of inductance \pm 10%(K) \pm 20%(M) \pm 30%(N)



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Electrical Characteristics

| Part Number | Inductance (μH) | Test Frequency (Hz) | DC Resistance (ΩMax) | I rms (A) typ. | I sat (A) typ. |
|------------------|---------------------------------|------------------------|---|-------------------|-------------------|
| SCD3308F-100□-PF | 10 | 100KHz | 0.11 | 2.40 | 2.48 |
| SCD3308F-150□-PF | 15 | 100KHz | 0.15 | 2.00 | 2.10 |
| SCD3308F-220□-PF | 22 | 100KHz | 0.23 | 1.60 | 1.64 |
| SCD3308F-330□-PF | 33 | 100KHz | 0.30 | 1.40 | 1.30 |
| SCD3308F-470□-PF | 47 | 100KHz | 0.39 | 1.00 | 1.00 |
| SCD3308F-680□-PF | 68 | 100KHz | 0.66 | 0.90 | 0.82 |
| SCD3308F-101□-PF | 100 | 100KHz | 0.84 | 0.70 | 0.70 |
| SCD3308F-151□-PF | 150 | 100KHz | 1.20 | 0.60 | 0.62 |
| SCD3308F-221□-PF | 220 | 100KHz | 1.90 | 0.50 | 0.48 |
| SCD3308F-331□-PF | 330 | 100KHz | 2.70 | 0.40 | 0.38 |
| SCD3308F-471□-PF | 470 | 100KHz | 4.00 | 0.30 | 0.28 |
| SCD3308F-681□-PF | 680 | 100KHz | 5.30 | 0.20 | 0.24 |
| SCD3308F-102□-PF | 1000 | 100KHz | 8.40 | 0.10 | 0.18 |

Note:

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- (4). DC current(A)that will cause L_o to drop approximately 10%.



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Electrical Characteristics

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DC Resistance (Ω Max) | I rms (A) typ. | I sat (A) typ. |
|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD3316F-1R0□-PF | 1.0 | 100KHz | 9m | 9.0 | 9.80 |
| SCD3316F-1R5□-PF | 1.5 | 100KHz | 10m | 8.0 | 9.20 |
| SCD3316F-2R2□-PF | 2.2 | 100KHz | 13m | 7.0 | 7.00 |
| SCD3316F-3R3□-PF | 3.3 | 100KHz | 15m | 6.4 | 6.50 |
| SCD3316F-4R7□-PF | 4.7 | 100KHz | 18m | 5.4 | 5.60 |
| SCD3316F-6R8□-PF | 6.8 | 100KHz | 27m | 4.6 | 4.50 |
| SCD3316F-100□-PF | 10 | 100KHz | 38m | 3.8 | 3.90 |
| SCD3316F-150□-PF | 15 | 100KHz | 56m | 3.0 | 3.10 |
| SCD3316F-220□-PF | 22 | 100KHz | 85m | 2.6 | 2.70 |
| SCD3316F-330□-PF | 33 | 100KHz | 0.10 | 2.0 | 2.10 |
| SCD3316F-470□-PF | 47 | 100KHz | 0.16 | 1.6 | 1.80 |
| SCD3316F-680□-PF | 68 | 100KHz | 0.22 | 1.4 | 1.50 |
| SCD3316F-101□-PF | 100 | 100KHz | 0.28 | 1.2 | 1.30 |
| SCD3316F-151□-PF | 150 | 100KHz | 0.40 | 1.0 | 1.00 |
| SCD3316F-221□-PF | 220 | 100KHz | 0.61 | 0.8 | 0.80 |
| SCD3316F-331□-PF | 330 | 100KHz | 1.02 | 0.6 | 0.68 |
| SCD3316F-471□-PF | 470 | 100KHz | 1.27 | 0.5 | 0.60 |
| SCD3316F-681□-PF | 680 | 100KHz | 2.20 | 0.4 | 0.42 |
| SCD3316F-102□-PF | 1000 | 100KHz | 3.00 | 0.3 | 0.34 |

Note:

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- (4). DC current(A)that will cause Lo to drop approximately 10%.



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Electrical Characteristics

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DC Resistance (Ω Max) | I rms (A) typ. | I sat (A) typ. |
|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD3326F-3R3□-PF | 3.3 | 100KHz | 14m | 10.0 | 8.30 |
| SCD3326F-4R7□-PF | 4.7 | 100KHz | 18m | 9.5 | 7.20 |
| SCD3326F-6R8□-PF | 6.8 | 100KHz | 23m | 9.0 | 6.00 |
| SCD3326F-100□-PF | 10 | 100KHz | 31m | 8.2 | 5.00 |
| SCD3326F-150□-PF | 15 | 100KHz | 47m | 6.5 | 4.00 |
| SCD3326F-220□-PF | 22 | 100KHz | 67m | 5.2 | 3.00 |
| SCD3326F-330□-PF | 33 | 100KHz | 0.10 | 4.3 | 2.50 |
| SCD3326F-470□-PF | 47 | 100KHz | 0.15 | 3.5 | 2.00 |
| SCD3326F-680□-PF | 68 | 100KHz | 0.20 | 3.0 | 1.70 |
| SCD3326F-101□-PF | 100 | 100KHz | 0.28 | 2.5 | 1.40 |
| SCD3326F-151□-PF | 150 | 100KHz | 0.43 | 2.0 | 1.10 |
| SCD3326F-221□-PF | 220 | 100KHz | 0.60 | 1.6 | 0.86 |
| SCD3326F-331□-PF | 330 | 100KHz | 0.88 | 1.4 | 0.70 |
| SCD3326F-471□-PF | 470 | 100KHz | 1.25 | 1.1 | 0.60 |
| SCD3326F-681□-PF | 680 | 100KHz | 1.80 | 0.9 | 0.54 |
| SCD3326F-102□-PF | 1000 | 100KHz | 2.70 | 0.7 | 0.45 |

Note:

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- (5). □Tolerance of inductance \pm 10%(K) \pm 20%(M) \pm 30%(N)



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Electrical Characteristics

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DC Resistance (Ω Max) | I rms (A) typ. | I sat (A) typ. |
|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD3340F-1R5□-PF | 1.5 | 100KHz | 11m | 18 | 13.50 |
| SCD3340F-2R2□-PF | 2.2 | 100KHz | 15m | 14 | 11.50 |
| SCD3340F-3R3□-PF | 3.3 | 100KHz | 12m | 15 | 10.50 |
| SCD3340F-4R7□-PF | 4.7 | 100KHz | 25m | 10 | 8.50 |
| SCD3340F-6R8□-PF | 6.8 | 100KHz | 30m | 9.5 | 6.10 |
| SCD3340F-8R0□-PF | 8 | 100KHz | 35m | 9.0 | 5.60 |
| SCD3340F-100□-PF | 10 | 100KHz | 40m | 8.0 | 5.40 |
| SCD3340F-150□-PF | 15 | 100KHz | 50m | 7.0 | 4.50 |
| SCD3340F-220□-PF | 22 | 100KHz | 66m | 5.5 | 3.80 |
| SCD3340F-330□-PF | 33 | 100KHz | 80m | 4.0 | 3.30 |
| SCD3340F-470□-PF | 47 | 100KHz | 110m | 3.8 | 2.80 |
| SCD3340F-680□-PF | 68 | 100KHz | 170m | 3.0 | 2.10 |
| SCD3340F-101□-PF | 100 | 100KHz | 220m | 2.5 | 1.80 |
| SCD3340F-151□-PF | 150 | 100KHz | 340m | 2.0 | 1.50 |
| SCD3340F-221□-PF | 220 | 100KHz | 440m | 1.6 | 1.20 |
| SCD3340F-331□-PF | 330 | 100KHz | 700m | 1.2 | 1.00 |
| SCD3340F-471□-PF | 470 | 100KHz | 1.1 | 1.0 | 0.71 |
| SCD3340F-681□-PF | 680 | 100KHz | 1.2 | 1.0 | 0.64 |
| SCD3340F-102□-PF | 1000 | 100KHz | 2.0 | 0.8 | 0.58 |

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Electrical Characteristics

| Part Number | Inductance (μ H) | Test Frequency (Hz) | DC Resistance (Ω Max) | I rms (A) typ. | I sat (A) typ. |
|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD5040F-4R7□-PF | 4.7 | 100KHz | 8.5m | 24.0 | 14.0 |
| SCD5040F-5R6□-PF | 5.6 | 100KHz | 9.8m | 20.3 | 12.5 |
| SCD5040F-6R8□-PF | 6.8 | 100KHz | 11.5m | 18.5 | 11.2 |
| SCD5040F-100□-PF | 10 | 100KHz | 15.7m | 16.7 | 9.5 |
| SCD5040F-150□-PF | 15 | 100KHz | 23.5m | 13.0 | 8.0 |
| SCD5040F-220□-PF | 22 | 100KHz | 34.2m | 10.6 | 6.5 |
| SCD5040F-330□-PF | 33 | 100KHz | 51.2m | 8.6 | 5.0 |
| SCD5040F-470□-PF | 47 | 100KHz | 71.4m | 7.0 | 4.0 |
| SCD5040F-680□-PF | 68 | 100KHz | 0.10 | 6.5 | 3.2 |
| SCD5040F-101□-PF | 100 | 100KHz | 0.15 | 5.0 | 2.8 |
| SCD5040F-151□-PF | 150 | 100KHz | 0.22 | 4.0 | 2.3 |
| SCD5040F-221□-PF | 220 | 100KHz | 0.31 | 3.3 | 1.8 |
| SCD5040F-331□-PF | 330 | 100KHz | 0.45 | 2.7 | 1.5 |
| SCD5040F-471□-PF | 470 | 100KHz | 0.60 | 2.2 | 1.2 |
| SCD5040F-681□-PF | 680 | 100KHz | 0.89 | 1.9 | 1.0 |
| SCD5040F-101□-PF | 1000 | 100KHz | 1.28 | 1.5 | 0.9 |

Note:

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Electrical Characteristics

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|------------------|--------------------------|------------------------|----------------------------------|-------------------|-------------------|
| SCD5022F-1R0□-PF | 1.0 | 100KHz | 9m | 20.0 | 10.50 |
| SCD5022F-2R2□-PF | 2.2 | 100KHz | 14m | 16.0 | 9.00 |
| SCD5022F-3R3□-PF | 3.3 | 100KHz | 15m | 14.0 | 8.00 |
| SCD5022F-4R7□-PF | 4.7 | 100KHz | 19m | 13.0 | 7.10 |
| SCD5022F-5R6□-PF | 5.6 | 100KHz | 20m | 12.0 | 6.30 |
| SCD5022F-6R8□-PF | 6.8 | 100KHz | 25m | 11.5 | 5.60 |
| SCD5022F-100□-PF | 10 | 100KHz | 31m | 10.0 | 5.20 |
| SCD5022F-150□-PF | 15 | 100KHz | 36m | 8.0 | 4.50 |
| SCD5022F-220□-PF | 22 | 100KHz | 47m | 7.0 | 3.90 |
| SCD5022F-330□-PF | 33 | 100KHz | 66m | 5.5 | 3.30 |
| SCD5022F-470□-PF | 47 | 100KHz | 86m | 4.5 | 2.80 |
| SCD5022F-680□-PF | 68 | 100KHz | 0.13 | 3.5 | 2.36 |
| SCD5022F-101□-PF | 100 | 100KHz | 0.19 | 3.0 | 1.95 |
| SCD5022F-151□-PF | 150 | 100KHz | 0.25 | 2.6 | 1.60 |
| SCD5022F-221□-PF | 220 | 100KHz | 0.38 | 2.4 | 1.20 |
| SCD5022F-331□-PF | 330 | 100KHz | 0.56 | 1.9 | 1.00 |
| SCD5022F-471□-PF | 470 | 100KHz | 0.85 | 1.4 | 0.80 |
| SCD5022F-681□-PF | 680 | 100KHz | 1.24 | 1.2 | 0.68 |
| SCD5022F-102□-PF | 1000 | 100KHz | 1.80 | 1.0 | 0.58 |

Note:

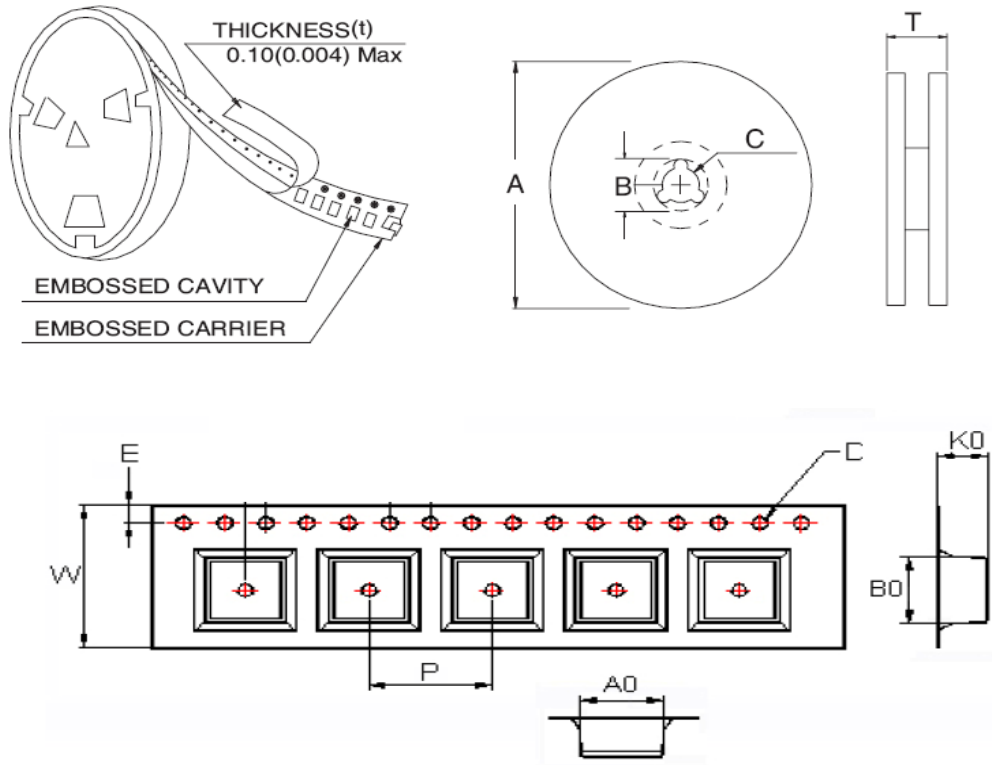
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SMD Power chokes- SCD-F Series

PACKAGING

1. Configuration.



2. Dimension in mm

| TYPE | A | B | C | T |
|------|-----|-----|--------|------|
| 12mm | 330 | 100 | 21±0.8 | 16.4 |
| 16mm | 330 | 100 | 21±0.8 | 20.4 |
| 24mm | 330 | 100 | 21±0.8 | 28.4 |
| 32mm | 330 | 100 | 21±0.8 | 36.4 |

| SERIES | Ao(mm) | Bo(mm) | Ko(mm) | W(mm) | P(mm) | PCS/REEL |
|----------|----------|-----------|----------|--------|--------|----------|
| SCD1608F | 4.4±0.1 | 6.7±0.1 | 3.2±0.1 | 16±0.3 | 8±0.1 | 2000 |
| SCD3308F | 9.7±0.1 | 13.25±0.1 | 3.3±0.1 | 24±0.3 | 16±0.1 | 1200 |
| SCD3316F | 9.65±0.1 | 13.3±0.1 | 5.6±0.1 | 24±0.3 | 12±0.1 | 800 |
| SCD3326F | 9.7±0.1 | 13.25±0.1 | 8.0±0.1 | 24±0.3 | 16±0.1 | 500 |
| SCD3340F | 9.7±0.1 | 13.25±0.1 | 11.3±0.1 | 32±0.3 | 24±0.1 | 250 |
| SCD5022F | 15.4±0.1 | 18.8±0.1 | 7.5±0.1 | 32±0.3 | 20±0.1 | 250 |
| SCD5040F | 15.4±0.1 | 19.3±0.1 | 11.5±0.1 | 32±0.3 | 24±0.1 | 200 |