

SUNLEI TECHNOLOGY CORP.

SMD Power chokes- SCB-C Series

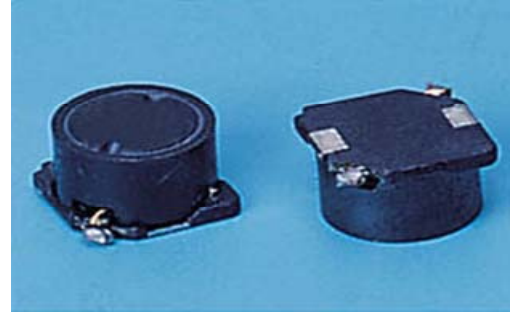
SCB-C series Shielded Inductors for low power loss Use

Features

- 1.High saturation for surface mounting
- 2.Avaible in magnetically shielded
- 3.Suitable for large currents.

Applications

VRT, OA equipment, LCD television sets,
Notebook computers, portable communications equipment,
DC/DC converters, etc.



Product Identification

SCB 73C- 100 M -PF

SCB: SERIES NAME

73:Dimensions CODE

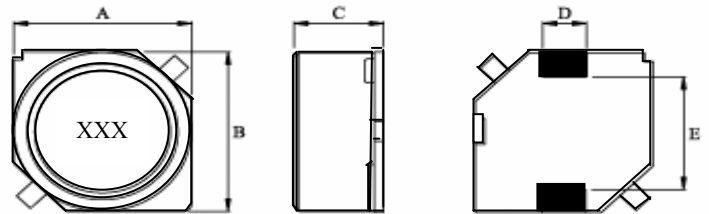
C:RI CORE TYPE

100: INDUCTANCE CODE.

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

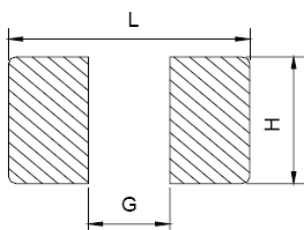
PF:Pb-Free

Dimensions (mm)



| SERIES | A | B | C | D | E |
|----------|---------|---------|---------|---------|---------|
| SCB63C | 6.3Max | 6.3Max | 3.3Max | 1.8±0.3 | 3.0±0.5 |
| SCB73C | 7.4Max | 7.4Max | 3.5Max | 2.0±0.3 | 5.0±0.5 |
| SCB74C | 7.4Max | 7.4Max | 4.5±0.3 | 2.0±0.3 | 5.0±0.5 |
| SCB75C | 7.4Max | 7.4Max | 5.5Max | 2.0±0.3 | 5.0±0.5 |
| SCB1045C | 10.4Max | 10.4Max | 4.5±0.3 | 3.0±0.3 | 6.0±0.5 |
| SCB1255C | 12.8Max | 12.8Max | 5.5±0.3 | 3.0±0.3 | 8.5±0.5 |
| SCB1275C | 12.8Max | 12.8Max | 8.0Max | 3.0±0.3 | 8.5±0.5 |

RECOMMENDER P.C.B LAYOUT



| SERIES | L | H | G |
|----------|------|-----|-----|
| SCB63C | 6.5 | 2.2 | 2.5 |
| SCB73C | 7.5 | 3.0 | 3.5 |
| SCB74C | 7.5 | 3.0 | 3.5 |
| SCB75C | 7.5 | 3.0 | 3.5 |
| SCB1045C | 10.5 | 3.2 | 5.5 |
| SCB1255C | 13.0 | 4.0 | 8.6 |
| SCB1275C | 13.0 | 4.0 | 8.6 |

SMD Power chokes- SCB-C Series

Electrical Characteristics

| Part Number | Inductance (uH) | Test Frequency (KHz) | DC Resistance (ΩMax) | Rated current (A)Max | Itemp (A)Max |
|----------------|--------------------|-------------------------|-------------------------|----------------------------|-----------------|
| SCB63C-2R2□-PF | 2.2 | 1 | 0.039 | 1.60 | 3.80 |
| SCB63C-3R3□-PF | 3.3 | 1 | 0.049 | 1.40 | 3.00 |
| SCB63C-4R7□-PF | 4.7 | 1 | 0.063 | 1.15 | 2.70 |
| SCB63C-6R8□-PF | 6.8 | 1 | 0.075 | 0.90 | 2.40 |
| SCB63C-100□-PF | 10 | 1 | 0.094 | 0.80 | 2.00 |
| SCB63C-120□-PF | 12 | 1 | 0.115 | 0.60 | 1.80 |
| SCB63C-150□-PF | 15 | 1 | 0.135 | 0.59 | 1.60 |
| SCB63C-180□-PF | 18 | 1 | 0.152 | 0.57 | 1.45 |
| SCB63C-220□-PF | 22 | 1 | 0.191 | 0.53 | 1.30 |
| SCB63C-270□-PF | 27 | 1 | 0.214 | 0.44 | 1.20 |
| SCB63C-330□-PF | 33 | 1 | 0.259 | 0.42 | 1.10 |
| SCB63C-390□-PF | 39 | 1 | 0.299 | 0.33 | 1.00 |
| SCB63C-470□-PF | 47 | 1 | 0.356 | 0.32 | 0.95 |
| SCB63C-560□-PF | 56 | 1 | 0.401 | 0.30 | 0.90 |
| SCB63C-680□-PF | 68 | 1 | 0.473 | 0.27 | 0.80 |
| SCB63C-820□-PF | 82 | 1 | 0.572 | 0.25 | 0.70 |
| SCB63C-101□-PF | 100 | 1 | 0.67 | 0.24 | 0.60 |
| SCB63C-121□-PF | 120 | 1 | 0.86 | 0.23 | 0.56 |
| SCB63C-151□-PF | 150 | 1 | 0.99 | 0.20 | 0.50 |

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 approximateΔT of 40°C.
- (4). DC current(A)that will cause Lo to drop approximately 10%.
- (5). □Tolerance of inductance±10%(K) ±20%(M) ±30%(N)

SMD Power chokes- SCB-C Series

Electrical Characteristics

| Part Number | Inductance (uH) | Test Frequency (KHz) | DC Resistance (Ω Max) | Rated current (A)Max | Itemp (A)Max |
|----------------|--------------------|-------------------------|----------------------------------|-------------------------|-----------------|
| SCB73C-1R0□-PF | 1 | 1 | 19.00m | 3.12 | 6.60 |
| SCB73C1R5□-PF | 1.5 | 1 | 23.00m | 2.85 | 5.90 |
| SCB73C-2R2□-PF | 2.2 | 1 | 28.00m | 2.66 | 5.30 |
| SCB73C-3R3□-PF | 3.3 | 1 | 35.00m | 2.26 | 4.50 |
| SCB73C-4R7□-PF | 4.7 | 1 | 43.00m | 1.96 | 3.50 |
| SCB73C-6R8□-PF | 6.8 | 1 | 55.00m | 1.76 | 3.15 |
| SCB73C-100□-PF | 10 | 1 | 80.00m | 1.34 | 2.50 |
| SCB73C-120□-PF | 12 | 1 | 90.00m | 1.23 | 2.25 |
| SCB73C-150□-PF | 15 | 1 | 0.12 | 1.09 | 2.15 |
| SCB73C-180□-PF | 18 | 1 | 0.13 | 0.99 | 1.80 |
| SCB73C-220□-PF | 22 | 1 | 0.15 | 0.90 | 1.60 |
| SCB73C-270□-PF | 27 | 1 | 0.21 | 0.81 | 1.40 |
| SCB73C-330□-PF | 33 | 1 | 0.25 | 0.72 | 1.30 |
| SCB73C-390□-PF | 39 | 1 | 0.31 | 0.67 | 1.24 |
| SCB73C-470□-PF | 47 | 1 | 0.35 | 0.60 | 1.11 |
| SCB73C-560□-PF | 56 | 1 | 0.43 | 0.55 | 0.94 |
| SCB73C-680□-PF | 68 | 1 | 0.52 | 0.50 | 0.89 |
| SCB73C-820□-PF | 82 | 1 | 0.6 | 0.46 | 0.84 |
| SCB73C-101□-PF | 100 | 1 | 0.79 | 0.41 | 0.80 |

Note:

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- (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)

SMD Power chokes- SCB-C Series

Electrical Characteristics

| Part Number | Inductance (uH) | Test Frequency (KHz) | DC Resistance (Ω Max) | Rated current (A)Max | Itemp (A)Max |
|----------------|--------------------|-------------------------|----------------------------------|-------------------------|-----------------|
| SCB74C-3R3M-PF | 3.3 | 1 | 0.02 | 2.5 | 2.3 |
| SCB74C-4R7M-PF | 4.7 | 1 | 0.03 | 2 | 2.1 |
| SCB74C-6R8M-PF | 6.8 | 1 | 0.039 | 1.7 | 1.74 |
| SCB74C-100M-PF | 10 | 1 | 0.036 | 1.3 | 1.78 |
| SCB74C-150M-PF | 15 | 1 | 0.052 | 1.1 | 1.53 |
| SCB74C-220M-PF | 22 | 1 | 0.061 | 0.9 | 1.34 |
| SCB74C-330M-PF | 33 | 1 | 0.096 | 0.82 | 1.09 |
| SCB74C-470M-PF | 47 | 1 | 0.125 | 0.75 | 0.92 |
| SCB74C-680M-PF | 68 | 1 | 0.175 | 0.6 | 0.77 |
| SCB74C-101M-PF | 100 | 1 | 0.25 | 0.5 | 0.65 |
| SCB74C-151M-PF | 150 | 1 | 0.34 | 0.4 | 0.55 |
| SCB74C-221M-PF | 220 | 1 | 0.52 | 0.33 | 0.45 |
| SCB74C-331M-PF | 330 | 1 | 0.74 | 0.25 | 0.37 |
| SCB74C-471M-PF | 470 | 1 | 1.05 | 0.22 | 0.31 |
| SCB74C-681M-PF | 680 | 1 | 1.48 | 0.2 | 0.27 |
| SCB74C-102M-PF | 1000 | 1 | 2.28 | 0.14 | 0.25 |

Note:

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

SMD Power chokes- SCB-C Series

Electrical Characteristics

| Part Number | Inductance (uH) | Test Frequency (KHz) | DC Resistance (Ω Max) | Rated current (A)Max | Itemp (A)Max |
|----------------|-----------------|----------------------|-------------------------------|----------------------|--------------|
| SCB75C-1R0□-PF | 1.0 | 1 | 23.00m | 2.88 | 6.50 |
| SCB75C-1R5□-PF | 1.5 | 1 | 27.00m | 2.61 | 6.30 |
| SCB75C-2R2□-PF | 2.2 | 1 | 30.00m | 2.46 | 4.80 |
| SCB75C-3R3□-PF | 3.3 | 1 | 35.00m | 2.28 | 3.80 |
| SCB75C-4R7□-PF | 4.7 | 1 | 41.00m | 2.08 | 3.40 |
| SCB75C-6R8□-PF | 6.8 | 1 | 47.00m | 1.94 | 3.00 |
| SCB75C-100□-PF | 10 | 1 | 50.00m | 1.68 | 2.60 |
| SCB75C-120□-PF | 12 | 1 | 70.00m | 1.54 | 2.34 |
| SCB75C-150□-PF | 15 | 1 | 80.00m | 1.39 | 2.10 |
| SCB75C-180□-PF | 18 | 1 | 90.00m | 1.26 | 1.89 |
| SCB75C-220□-PF | 22 | 1 | 0.11 | 1.13 | 1.70 |
| SCB75C-270□-PF | 27 | 1 | 0.15 | 1.02 | 1.62 |
| SCB75C-330□-PF | 33 | 1 | 0.17 | 0.84 | 1.52 |
| SCB75C-390□-PF | 39 | 1 | 0.18 | 0.80 | 1.36 |
| SCB75C-470□-PF | 47 | 1 | 0.2 | 0.76 | 1.27 |
| SCB75C-560□-PF | 56 | 1 | 0.28 | 0.64 | 1.20 |
| SCB75C-680□-PF | 68 | 1 | 0.32 | 0.60 | 1.14 |
| SCB75C-820□-PF | 82 | 1 | 0.35 | 0.57 | 1.08 |
| SCB75C-101□-PF | 100 | 1 | 0.4 | 0.50 | 0.96 |
| SCB75C-121□-PF | 120 | 1 | 0.44 | 0.47 | 0.91 |
| SCB75C-151□-PF | 150 | 1 | 0.73 | 0.40 | 0.81 |
| SCB75C-181□-PF | 180 | 1 | 0.78 | 0.39 | 0.72 |
| SCB75C-221□-PF | 220 | 1 | 0.94 | 0.33 | 0.64 |
| SCB75C-271□-PF | 270 | 1 | 1.25 | 0.31 | 0.58 |
| SCB75C-331□-PF | 330 | 1 | 1.4 | 0.27 | 0.49 |
| SCB75C-391□-PF | 390 | 1 | 1.52 | 0.27 | 0.44 |
| SCB75C-471□-PF | 470 | 1 | 1.7 | 0.25 | 0.42 |
| SCB75C-561□-PF | 560 | 1 | 2.39 | 0.22 | 0.40 |

Note:

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- (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 (uH) | Test Frequency (KHz) | DC Resistance (Ω Max) | Rated current (A)Max | Itemp (A)Max |
|------------------|--------------------|-------------------------|----------------------------------|-------------------------|-----------------|
| SCB1045C-100□-PF | 10 | 1 | 0.044 | 3.00 | 3.50 |
| SCB1045C-150□-PF | 15 | 1 | 0.057 | 2.40 | 2.50 |
| SCB1045C-220□-PF | 22 | 1 | 0.071 | 2.10 | 1.90 |
| SCB1045C-330□-PF | 33 | 1 | 0.098 | 1.60 | 1.70 |
| SCB1045C-470□-PF | 47 | 1 | 0.12 | 1.40 | 1.50 |
| SCB1045C-680□-PF | 68 | 1 | 0.17 | 1.20 | 1.30 |
| SCB1045C-101□-PF | 100 | 1 | 0.24 | 1.00 | 1.10 |
| SCB1045C-151□-PF | 150 | 1 | 0.42 | 0.79 | 0.81 |
| SCB1045C-221□-PF | 220 | 1 | 0.56 | 0.65 | 0.70 |
| SCB1045C-331□-PF | 330 | 1 | 0.82 | 0.54 | 0.58 |
| SCB1045C-471□-PF | 470 | 1 | 1.24 | 0.47 | 0.47 |
| SCB1045C-681□-PF | 680 | 1 | 1.92 | 0.38 | 0.38 |
| SCB1045C-102□-PF | 1000 | 1 | 3.36 | 0.32 | 0.29 |
| SCB1045C-152□-PF | 1500 | 1 | 4.10 | 0.22 | 0.26 |

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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 (uH) | Test Frequency (KHz) | DC Resistance (Ω Max) | Rated current (A)Max | Itemp (A)Max |
|------------------|-----------------|----------------------|-------------------------------|----------------------|--------------|
| SCB1255C-6R0□-PF | 6 | 1 | 0.0164 | 3.6 | 4.9 |
| SCB1255C-100□-PF | 10 | 1 | 0.0215 | 3.4 | 4.3 |
| SCB1255C-150□-PF | 15 | 1 | 0.0259 | 2.8 | 3.9 |
| SCB1255C-220□-PF | 22 | 1 | 0.0338 | 2.3 | 3.4 |
| SCB1255C-330□-PF | 33 | 1 | 0.0415 | 1.9 | 3.1 |
| SCB1255C-470□-PF | 47 | 1 | 0.0618 | 1.6 | 2.5 |
| SCB1255C-680□-PF | 68 | 1 | 0.0832 | 1.3 | 2.2 |
| SCB1255C-101□-PF | 100 | 1 | 0.117 | 1.1 | 1.8 |
| SCB1255C-151□-PF | 150 | 1 | 0.19 | 0.88 | 1.4 |
| SCB1255C-221□-PF | 220 | 1 | 0.27 | 0.72 | 1.2 |
| SCB1255C-331□-PF | 330 | 1 | 0.41 | 0.59 | 1 |
| SCB1255C-471□-PF | 470 | 1 | 0.52 | 0.49 | 0.88 |
| SCB1255C-681□-PF | 680 | 1 | 0.76 | 0.43 | 0.73 |
| SCB1255C-102□-PF | 1000 | 1 | 1.12 | 0.34 | 0.6 |
| SCB1255C-152□-PF | 1500 | 1 | 1.73 | 0.29 | 0.48 |

Note:

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

SMD Power chokes- SCB-C Series

Electrical Characteristics

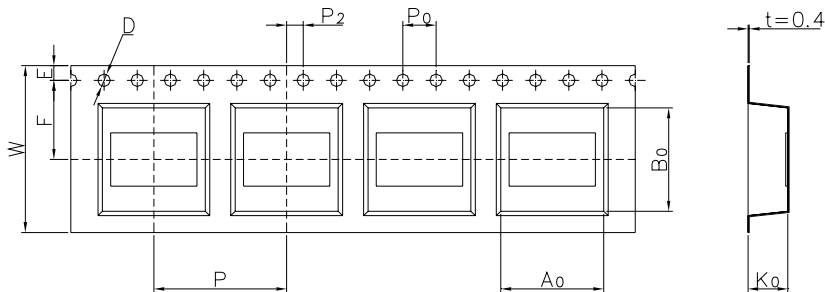
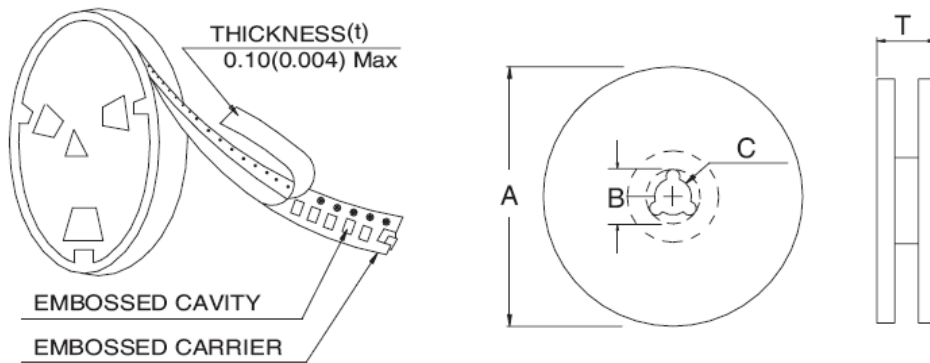
| Part Number | Inductance (uH) | Test Frequency (KHz) | DC Resistance (ΩMax) | Rated current (A)Max | Itemp (A)Max |
|------------------|--------------------|-------------------------|-------------------------|----------------------------|-----------------|
| SCB1275C-1R2□-PF | 1.2 | 1 | 0.0069 | 13.0 | 8.2 |
| SCB1275C-2R7□-PF | 2.7 | 1 | 0.0094 | 10.0 | 7.0 |
| SCB1275C-3R9□-PF | 3.9 | 1 | 0.0104 | 9.0 | 6.7 |
| SCB1275C-5R6□-PF | 5.6 | 1 | 0.0116 | 7.8 | 6.3 |
| SCB1275C-6R8□-PF | 6.8 | 1 | 0.0131 | 7.2 | 5.9 |
| SCB1275C-100□-PF | 10 | 1 | 0.0156 | 5.5 | 5.4 |
| SCB1275C-150□-PF | 15 | 1 | 0.0184 | 4.7 | 5.0 |
| SCB1275C-220□-PF | 22 | 1 | 0.0263 | 4.0 | 4.0 |
| SCB1275C-330□-PF | 33 | 1 | 0.0395 | 3.2 | 3.4 |
| SCB1275C-470□-PF | 47 | 1 | 0.0528 | 2.7 | 3.0 |
| SCB1275C-680□-PF | 68 | 1 | 0.0778 | 2.0 | 2.4 |
| SCB1275C-101□-PF | 100 | 1 | 0.125 | 1.9 | 1.9 |
| SCB1275C-151□-PF | 150 | 1 | 0.175 | 1.5 | 1.6 |
| SCB1275C-221□-PF | 220 | 1 | 0.258 | 1.3 | 1.3 |
| SLF1045T-152□-PF | 1500 | 1 | 1.73 | 0.3 | 0.5 |

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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 | A ₀ (mm) | B ₀ (mm) | K ₀ (mm) | W(mm) | P(mm) | PCS/REEL |
|----------|---------------------|---------------------|---------------------|--------|--------|----------|
| SCB63C | 6.4±0.1 | 6.4±0.1 | 3.5±0.1 | 16±0.3 | 12±0.1 | 1000 |
| SCB73C | 7.5±0.1 | 7.5±0.1 | 3.7±0.1 | 16±0.3 | 12±0.1 | 1000 |
| SCB75C | 7.5±0.1 | 7.5±0.1 | 5.0±0.1 | 16±0.3 | 12±0.1 | 1000 |
| SCB75C | 7.5±0.1 | 7.5±0.1 | 5.5±0.1 | 16±0.3 | 12±0.1 | 1000 |
| SCB1045C | 10.5±0.1 | 10.5±0.1 | 5.5±0.1 | 24±0.3 | 16±0.1 | 500 |
| SCB1255C | 13.1±0.1 | 13.1±0.1 | 6.5±0.1 | 24±0.3 | 16±0.1 | 500 |
| SCB1275C | 13.1±0.1 | 13.1±0.1 | 8.5±0.1 | 24±0.3 | 16±0.1 | 500 |