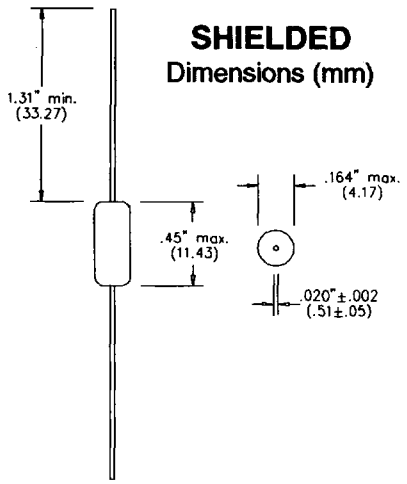
ABRACON CORPORATION

# Shielded AXIAL INDUCTORS
## 1645S Series




**SHIELDED**
Dimensions (mm)

## STANDARD SPECIFICATIONS

Operating Temperature Range ..... -55°C to +125°C
Ambient Temperature ..... 85°C
Inductance Tolerance ..... ±10% across inductance range
Shielding ..... less than 3% coupling, units side by side @ 1KHz
Incremental Current ..... DC current causes 5% maximum reduction in intductance for nominal value of inductance measured with zero DC current
Packaging ..... bulk, or tape and reel

## PART NUMBER GUIDE

| Part Number | L (uH) | Q min. | Test Freq. (MHz) | SRF Min. (MHz) | DCR Max. (Ω) | Curr. max(mA) RatedDC | Curr. max(mA) Incr.* |
|---|---|---|---|---|---|---|---|
| 1645SR10K | .10 | 50 | 25 | 400 | .026 | 3000 | 3000 |
| 1645SR12K | .12 | 50 | 25 | 400 | .029 | 2860 | 2860 |
| 1645SR15K | .15 | 50 | 25 | 400 | .034 | 2600 | 2600 |
| 1645SR18K | .18 | 50 | 25 | 400 | .044 | 2300 | 2300 |
| 1645SR22K | .22 | 50 | 25 | 400 | .056 | 2050 | 2050 |
| 1645SR27K | .27 | 50 | 25 | 400 | .090 | 1625 | 1625 |
| 1645SR33K | .33 | 47 | 25 | 325 | .122 | 1400 | 1400 |
| 1645SR39K | .39 | 47 | 25 | 290 | .161 | 1220 | 1220 |
| 1645SR47K | .47 | 47 | 25 | 264 | .218 | 1060 | 1060 |
| 1645SR56K | .56 | 45 | 25 | 249 | .290 | 900 | 900 |
| 1645SR68K | .68 | 43 | 25 | 221 | .382 | 790 | 790 |
| 1645SR82K | .82 | 41 | 25 | 200 | .450 | 725 | 725 |
| 1645S1R0K | 1.0 | 42 | 7.9 | 156 | .054 | 2080 | 2080 |
| 1645S1R2K | 1.2 | 43 | 7.9 | 154 | .070 | 1840 | 1840 |
| 1645S1R5K | 1.5 | 41 | 7.9 | 128 | .096 | 1560 | 1560 |
| 1645S1R8K | 1.8 | 42 | 7.9 | 121 | .107 | 1480 | 1480 |
| 1645S2R2K | 2.2 | 42 | 7.9 | 108 | .142 | 1290 | 1290 |
| 1645S2R7K | 2.7 | 41 | 7.9 | 96 | .184 | 1130 | 1130 |
| 1645S3R3K | 3.3 | 41 | 7.9 | 88 | .260 | 950 | 950 |
| 1645S3R9K | 3.9 | 41 | 7.9 | 84 | .354 | 815 | 815 |
| 1645S4R7K | 4.7 | 42 | 7.9 | 72 | .468 | 710 | 710 |
| 1645S5R6K | 5.6 | 42 | 7.9 | 69 | .511 | 680 | 680 |
| 1645S6R8K | 6.8 | 42 | 7.9 | 62 | .750 | 560 | 560 |
| 1645S8R2K | 8.2 | 46 | 7.9 | 58 | .828 | 535 | 535 |
| 1645S100K | 10 | 46 | 2.5 | 53 | 1.27 | 432 | 432 |
| 1645S120K | 12 | 50 | 2.5 | 47 | 1.76 | 368 | 368 |
| 1645S150K | 15 | 50 | 2.5 | 41 | 2.30 | 325 | 325 |
| 1645S180K | 18 | 50 | 2.5 | 43 | .667 | 596 | 235 |
| 1645S220K | 22 | 50 | 2.5 | 38 | .742 | 565 | 220 |
| 1645S270K | 27 | 50 | 2.5 | 36 | .850 | 526 | 200 |
| 1645S330K | 33 | 50 | 2.5 | 33 | .928 | 505 | 190 |
| 1645S390K | 39 | 50 | 2.5 | 29.4 | 1.28 | 429 | 180 |
| 1645S470K | 47 | 55 | 2.5 | 26.5 | 1.48 | 400 | 175 |
| 1645S560K | 56 | 55 | 2.5 | 25 | 1.64 | 380 | 160 |
| 1645S680K | 68 | 55 | 2.5 | 23 | 2.20 | 328 | 150 |
| 1645S820K | 82 | 55 | 2.5 | 14 | 1.96 | 349 | 140 |
| 1645S101K | 100 | 65 | .79 | 12 | 2.28 | 322 | 120 |
| 1645S121K | 120 | 65 | 79 | 11.2 | 2.45 | 311 | 95 |
| 1645S151K | 150 | 65 | .79 | 10.5 | 2.79 | 294 | 90 |
| 1645S181K | 180 | 65 | .79 | 10 | 3.08 | 277 | 85 |
| 1645S221K | 220 | 65 | .79 | 9.4 | 3.48 | 251 | 80 |
| 1645S271K | 270 | 65 | .79 | 8.0 | 4.55 | 231 | 70 |
| 1645S331K | 330 | 65 | .79 | 7.3 | 5.10 | 215 | 65 |
| 1645S391K | 390 | 65 | .79 | 6.9 | 5.62 | 205 | 60 |
| 1645S471K | 470 | 70 | .79 | 6.5 | 6.45 | 192 | 58 |
| 1645S561K | 560 | 70 | .79 | 6.0 | 8.00 | 174 | 55 |
| 1645S681K | 680 | 75 | .79 | 5.6 | 8.85 | 163 | 50 |
| 1645S821K | 820 | 70 | .79 | 4.8 | 10.40 | 151 | 45 |
| 1645S102K | 1000 | 65 | .79 | 4.5 | 12.10 | 139 | 40 |
| 1645S122K | 1200 | 70 | .25 | 2.6 | 15.10 | 125 | 35 |
| 1645S152K | 1500 | 70 | .25 | 2.5 | 16.80 | 119 | 33 |
| 1645S182K | 1800 | 70 | .25 | 2.3 | 19.10 | 111 | 30 |
| 1645S222K | 2200 | 70 | .25 | 2.2 | 22.00 | 103 | 27 |
| 1645S272K | 2700 | 70 | .25 | 2.1 | 25.10 | 97 | 25 |
| 1645S332K | 3300 | 70 | .25 | 2.0 | 33.30 | 85 | 22 |
| 1645S392K | 3900 | 70 | .25 | 1.8 | 36.80 | 80 | 20 |
| 1645S472K | 4700 | 70 | .25 | 1.7 | 51.20 | 68 | 19 |
| 1645S562K | 5600 | 70 | .25 | 1.6 | 54.60 | 65 | 17 |
| 1645S682K | 6800 | 70 | .25 | 1.5 | 62.00 | 62 | 16 |
| 1645S822K | 8200 | 70 | .25 | 1.4 | 86.60 | 52 | 15 |
| 1645S103K | 10000 | 70 | .079 | 1.3 | 93.10 | 50 | 14 |
| 1645S123K | 12000 | 50 | .079 | 0.880 | 84 | 53 | 13 |
| 1645S153K | 15000 | 50 | .079 | 0.775 | 97 | 49 | 12 |
| 1645S183K | 18000 | 50 | .079 | 0.720 | 104 | 48 | 10 |
| 1645S223K | 22000 | 50 | .079 | 0.567 | 145 | 40 | 9 |
| 1645S273K | 27000 | 50 | .079 | 0.455 | 195 | 34 | 8 |
| 1645S333K | 33000 | 50 | .079 | 0.420 | 222 | 32 | 7.5 |
| 1645S393K | 39000 | 50 | .079 | 0.415 | 242 | 31 | 6 |
| 1645S473K | 47000 | 50 | .079 | 0.368 | 317 | 27 | 5.5 |
| 1645S563K | 56000 | 50 | .079 | 0.360 | 362 | 25 | 5 |
| 1645S683K | 68000 | 50 | .079 | 0.344 | 410 | 24 | 4 |
| 1645S823K | 82000 | 50 | .079 | 0.332 | 440 | 23 | 3.5 |
| 16455104K | 100000 | 50 | .079 | 0.320 | 484 | 22 | 3 |

* the direct current which causes up to a 5% reduction from initial inductance

Letter suffix on part number denotes tolerance:
M = ±20%
K = ±10%
J = ±5%

All specifications subject to change without notice

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