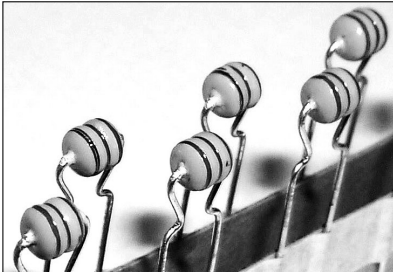


RADIAL LEADED INDUCTORS

■ OPERATING TEMP

-25 ~ +85°C (Including self-generated heat)

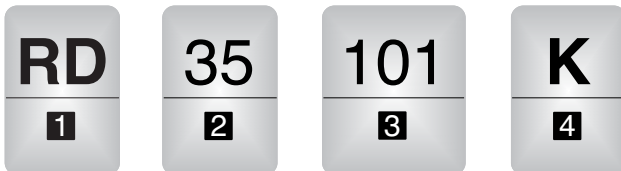


■ FEATURES

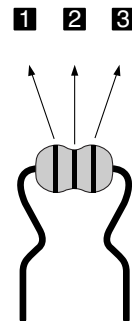
- The RD Series inductors are available in 3 form factors range from 35 to 45.
- For small current applications

■ APPLICATION

Consumer electronics such as VCR, TV and Monitor other electronic equipment.



■ MARKING



■ ORDERING CODE

| 1 TYPE | |
|--------|------------------------|
| RD | Radial Leaded Inductor |

| 2 TYPE DIMENSION | |
|------------------|-----------|
| 35 | 6.0 × 4.0 |
| 40 | 8.0 × 5.0 |
| 45 | 9.5 × 6.0 |

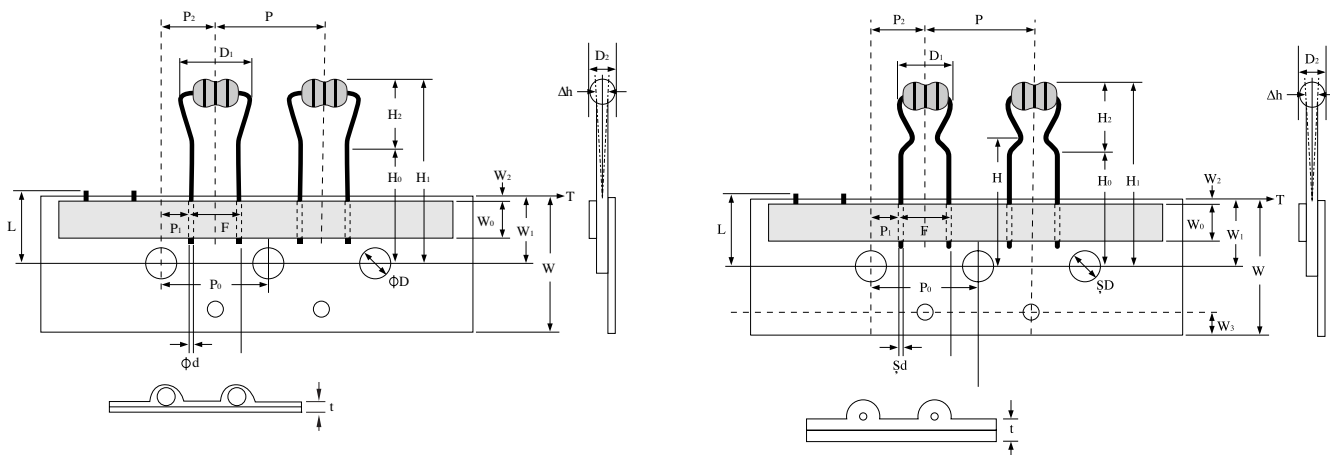
| 3 MARKING INDUCTANCE | |
|----------------------|--------|
| R22 | 0.22μH |
| 1R5 | 1.5μH |
| 120 | 12μH |

| 4 INDUCTANCE TOLERANCE | |
|------------------------|-------|
| J | ± 5% |
| K | ± 10% |

| Color | Inductance[μH] | | |
|--------|----------------|-----------|------------|
| | 1st Digit | 2nd Digit | Multiplier |
| | 1 | 2 | 3 |
| Black | 0 | | × 1 |
| Brown | 1 | | × 10 |
| Red | 2 | | × 100 |
| Orange | 3 | | × 1000 |
| Yellow | 4 | | - |
| Green | 5 | | - |
| Blue | 6 | | - |
| Purple | 7 | | - |
| Grey | 8 | | - |
| White | 9 | | - |
| Gold | - | | × 0.1 |
| Silver | - | | × 0.01 |

RADIAL LEADED INDUCTORS

■ TAPING DIMENSIONS



Note 1. No more than 3 consecutive pieces can be omitted.

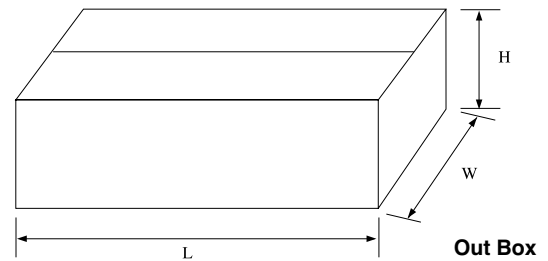
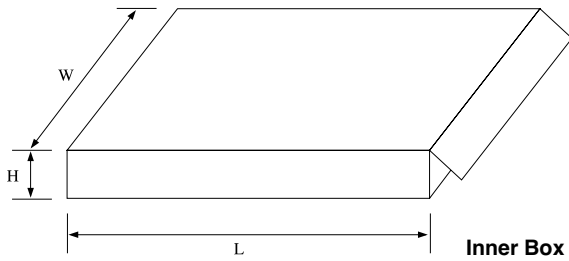
Unit: mm

| Symbol | Dimensions | | | |
|--------|----------------------|---------|---------------------|----------|
| | RD35H | RD35 | RD40 | RD45 |
| D1 | 7.5max. | 6.0max. | 8.0max. | 9.5max. |
| D2 | 4.0max. | 4.0max. | 5.0max. | 6.0max. |
| H1 | 26max. | 26max. | 27.5max. | 27.5max. |
| H2 | 5max. | 9max. | 10.5max. | 10.5max. |
| H0 | $6.5 \leq H_0 - W_1$ | | | |
| P | 12.7 ± 1.0 | | | |
| P0 | 12.7 ± 0.3 | | | |
| P1 | 3.85 ± 0.5 | | | |
| P2 | 6.35 ± 1.3 | | | |
| F | $5.0^{+0.8}_{-0.3}$ | | $5.0^{+0.6}_{-0.2}$ | |
| Δh | 0.0 ± 2.0 | | | |
| W | $18^{+1.0}_{-0.5}$ | | | |
| W0 | 6.0 ± 0.1 | | | |
| W1 | $9^{+0.75}_{-0.5}$ | | $9^{+1.0}_{-0.5}$ | |
| W2 | $T \geq W_2$ | | | |
| ØD | 4.0 ± 0.3 | | | |
| Ød | 0.50 ± 0.05 | | 0.60 ± 0.05 | |
| L | 11.0max. | | | |
| t | 0.5 ± 2.0 | | | |

P0: Accumulated error for 20 pitches is ± 1 mm

W2: Bonding tape must not protrude from the base tape.

■ PACKAGING



| Type | Inner Box | | Out Box | | | Item |
|-----------|---------------------|----------|---------------------|----------|--------|-------|
| | Size(mm) (W×H×L) | Quantity | Size(mm) (W×H×L) | Quantity | Wtight | |
| RD Series | 187×40×325 | 2,000 | 340×255×580 | 36,000 | 12Kg | RD35 |
| | | 1,000 | | 18,000 | 10Kg | RD40 |
| | | 1,500 | | 27,000 | 18Kg | RD45 |
| | | 2,000 | | 36,000 | 12Kg | RD35H |

■ AVAILABLE INDUCTANCE RANGE

| Type | | 0.22 | 1μH | 10μH | 100μH | 1,000μH | 10,000μH | 20,000μH | |
|-------|------------------------|------------|------|------------|-------|---------|----------|----------|--|
| RD35 | I _{max} .(mA) | 1,000 | 790 | 460 | 150 | 55 | | | |
| | Inductance(μH) | [REDACTED] | | | | | 1,000μH | | |
| | R _{dc} (mΩ) | 0.09 | 0.17 | 0.45 | 3.3 | 28 | | | |
| RD40 | I _{max} .(mA) | 816 | 707 | 353 | 174 | 48 | | | |
| | Inductance(μH) | [REDACTED] | | | | | 2,200μH | | |
| | R _{dc} (mΩ) | 0.15 | 0.2 | 0.8 | 3.3 | 42 | | | |
| RD45 | I _{max} .(mA) | | | 780 | 260 | 85 | 21 | | |
| | Inductance(μH) | | | [REDACTED] | | | | 15,000μH | |
| | R _{dc} (mΩ) | | | 0.19 | 0.85 | 8.9 | 160 | | |
| RD35H | I _{max} .(mA) | 1,000 | 790 | 460 | 150 | 56 | | | |
| | Inductance(μH) | [REDACTED] | | | | | 1,000μH | | |
| | R _{dc} (mΩ) | 0.09 | 0.17 | 0.45 | 3.3 | 31.5 | | | |

RADIAL LEADED
INDUCTORS

ITEM PART NUMBERS

● RD35

| Ordering Code | Inductance [μ H] | Inductance Tolerance | Q (min.) | Measuring Frequency [MHz] | Self-Resonant Frequency [MHz] (min.) | DC Resistance [Ω] (max.) | Rated Current [mA] (max.) |
|---------------|--------------------------|-----------------------------|-------------|---------------------------------|---|--|------------------------------------|
| RD35R22K | 0.22 | $\pm 10\%$ ($\pm 5\%$) | 50 | 25.2 | 170 | 0.09 | 1000 |
| RD35R27K | 0.27 | | | | 160 | 0.10 | 980 |
| RD35R33K | 0.33 | | | | 140 | 0.11 | 960 |
| RD35R39K | 0.39 | | | | 130 | 0.12 | 940 |
| RD35R47K | 0.47 | | | | 120 | 0.13 | 910 |
| RD35R56K | 0.56 | | | | 110 | 0.14 | 880 |
| RD35R68K | 0.68 | | | | 100 | 0.15 | 850 |
| RD35R82K | 0.82 | | | | 90 | 0.16 | 820 |
| RD351R0K | 1.0 | | | | 82 | 0.17 | 790 |
| RD351R2K | 1.2 | | | | 70 | 0.18 | 760 |
| RD351R5K | 1.5 | | | 65 | 0.20 | 730 | |
| RD351R8K | 1.8 | | | 57 | 0.22 | 700 | |
| RD352R2K | 2.2 | | | 47 | 0.24 | 670 | |
| RD352R7K | 2.7 | | | 40 | 0.26 | 640 | |
| RD353R3K | 3.3 | | | 35 | 0.28 | 610 | |
| RD353R9K | 3.9 | | | 33 | 0.30 | 580 | |
| RD354R7K | 4.7 | | | 31 | 0.33 | 560 | |
| RD355R6K | 5.6 | | | 27 | 0.36 | 540 | |
| RD356R8K | 6.8 | | | 24 | 0.39 | 520 | |
| RD358R2K | 8.2 | | | 22 | 0.42 | 490 | |
| RD35100K | 10 | | | 21 | 0.45 | 460 | |
| RD35120K | 12 | | | 18 | 1.2 | 350 | |
| RD35150K | 15 | | | 16 | 1.3 | 330 | |
| RD35180K | 18 | | | 14 | 1.4 | 300 | |
| RD35220K | 22 | | | 13 | 1.5 | 270 | |
| RD35270K | 27 | | | 12 | 1.6 | 250 | |
| RD35330K | 33 | | | 11 | 1.8 | 235 | |
| RD35390K | 39 | | | 10 | 2.0 | 220 | |
| RD35470K | 47 | | | 9.5 | 2.2 | 200 | |
| RD35560K | 56 | | | 9.0 | 2.4 | 190 | |
| RD35680K | 68 | | | 8.5 | 2.8 | 170 | |
| RD35820K | 82 | | | 8.0 | 3.0 | 155 | |
| RD35101K | 100 | | | 7.5 | 3.3 | 150 | |
| RD35121K | 120 | | | 6.8 | 4.2 | 140 | |
| RD35151K | 150 | | | 6.2 | 5.0 | 130 | |
| RD35181K | 180 | | | 5.6 | 6.0 | 125 | |
| RD35221K | 220 | | | 5.0 | 7.5 | 120 | |
| RD35271K | 270 | | | 4.6 | 11 | 105 | |
| RD35331K | 330 | | | 4.2 | 13 | 95 | |
| RD35391K | 390 | | | 3.8 | 15 | 90 | |
| RD35471K | 470 | 3.4 | 17 | 80 | | | |
| RD35561K | 560 | 3.0 | 19 | 75 | | | |
| RD35681K | 680 | 2.6 | 22 | 68 | | | |
| RD35821K | 820 | 2.2 | 25 | 60 | | | |
| RD35102K | 1000 | 2.0 | 28 | 55 | | | |
| | | | | 7.96 | | | |
| | | | | 2.52 | | | |
| | | | | 0.796 | | | |

● RD35H

| Ordering Code | Inductance [μ H] | Inductance Tolerance | Q (min.) | Measuring Frequency [MHz] | Self-Resonant Frequency [MHz] (min.) | DC Resistance [Ω] (max.) | Rated Current [mA] (max.) |
|---------------|--------------------------|-----------------------------|-------------|---------------------------------|---|--|------------------------------------|
| RD35T-R22K-H | 0.22 | $\pm 10\%$ ($\pm 5\%$) | 50 | 25.2 | 170.0 | 0.09 | 1000 |
| RD35T-R27K-H | 0.27 | | | | 160.0 | 0.10 | 980 |
| RD35T-R33K-H | 0.33 | | | | 140.0 | 0.11 | 960 |
| RD35T-R39K-H | 0.39 | | | | 130.0 | 0.12 | 940 |
| RD35T-R47K-H | 0.47 | | | | 120.0 | 0.13 | 910 |
| RD35T-R56K-H | 0.56 | | | | 110.0 | 0.14 | 880 |
| RD35T-R68K-H | 0.68 | | | | 100.0 | 0.15 | 850 |
| RD35T-R82K-H | 0.82 | | | | 90.0 | 0.16 | 820 |
| RD35T-1R0J-H | 1.0 | | | 82.0 | 0.17 | 790 | |
| RD35T-1R2J-H | 1.2 | | | 70.0 | 0.18 | 760 | |
| RD35T-1R5J-H | 1.5 | | | 65.0 | 0.20 | 730 | |
| RD35T-1R8J-H | 1.8 | | | 57.0 | 0.22 | 700 | |
| RD35T-2R2J-H | 2.2 | | | 47.0 | 0.24 | 670 | |
| RD35T-2R7J-H | 2.7 | | | 40.0 | 0.26 | 640 | |
| RD35T-3R3J-H | 3.3 | | | 35.0 | 0.28 | 610 | |
| RD35T-3R9J-H | 3.9 | | | 33.0 | 0.30 | 580 | |
| RD35T-4R7J-H | 4.7 | | | 31.0 | 0.33 | 560 | |
| RD35T-5R6J-H | 5.6 | | | 27.0 | 0.36 | 540 | |
| RD35T-6R8J-H | 6.8 | | | 24.0 | 0.39 | 520 | |
| RD35T-8R2J-H | 8.2 | | | 22.0 | 0.42 | 490 | |
| RD35T-100J-H | 10 | | | 21.0 | 0.45 | 460 | |
| RD35T-120J-H | 12 | | | 18.0 | 1.2 | 350 | |
| RD35T-150J-H | 15 | | | 16.0 | 1.3 | 330 | |
| RD35T-180J-H | 18 | | | 14.0 | 1.4 | 300 | |
| RD35T-220J-H | 22 | | | 13.0 | 1.5 | 270 | |
| RD35T-270J-H | 27 | | | 12.0 | 1.6 | 250 | |
| RD35T-330J-H | 33 | | | 11.0 | 1.8 | 235 | |
| RD35T-390J-H | 39 | | | 10.0 | 2.0 | 220 | |
| RD35T-470J-H | 47 | | | 9.5 | 2.2 | 200 | |
| RD35T-560J-H | 56 | | | 9.0 | 2.4 | 190 | |
| RD35T-680J-H | 68 | | | 8.5 | 2.8 | 170 | |
| RD35T-820J-H | 82 | | | 8.0 | 3.0 | 155 | |
| RD35T-101K-H | 100 | | | 7.5 | 3.3 | 150 | |
| RD35T-121K-H | 120 | | | 6.8 | 4.2 | 140 | |
| RD35T-151K-H | 150 | | | 6.2 | 5.0 | 130 | |
| RD35T-181K-H | 180 | | | 5.6 | 6.0 | 125 | |
| RD35T-221K-H | 220 | | | 5.0 | 7.5 | 120 | |
| RD35T-271K-H | 270 | | | 4.6 | 11.0 | 105 | |
| RD35T-331K-H | 330 | | 4.2 | 13.0 | 95 | | |
| RD35T-391K-H | 390 | | 3.8 | 15.0 | 90 | | |
| RD35T-471K-H | 470 | 3.4 | 17.0 | 80 | | | |
| RD35T-561K-H | 560 | 2.4 | 21.0 | 69 | | | |
| RD35T-681K-H | 680 | 2.2 | 23.5 | 65 | | | |
| RD35T-821K-H | 820 | 2.0 | 26.5 | 61 | | | |
| RD35T-102K-H | 1000 | 25 | 0.252 | 1.8 | 31.5 | 56 | |

RADIAL LEADED
INDUCTORS

ITEM PART NUMBERS

● RD40

| Ordering Code | Inductance [μ H] | Inductance Tolerance | Q (min.) | Measuring Frequency [MHz] | Self-Resonant Frequency [MHz] (min.) | DC Resistance [Ω] (max.) | Rated Current [mA] (max.) |
|---------------|--------------------------|-----------------------------|-------------|---------------------------------|---|--|------------------------------------|
| RD40R22K | 0.22 | $\pm 10\%$ ($\pm 5\%$) | 50 | 25.2 | 150 | 0.15 | 816 |
| RD40R27K | 0.27 | | | | 150 | 0.15 | 816 |
| RD40R33K | 0.33 | | | | 150 | 0.15 | 816 |
| RD40R39K | 0.39 | | | | 130 | 0.15 | 816 |
| RD40R47K | 0.47 | | | | 130 | 0.15 | 816 |
| RD40R56K | 0.56 | | | | 130 | 0.20 | 707 |
| RD40R68K | 0.68 | | | | 120 | 0.20 | 707 |
| RD40R82K | 0.82 | | | | 120 | 0.20 | 707 |
| RD401R0K | 1.0 | | | 7.96 | 100 | 0.20 | 707 |
| RD401R2K | 1.2 | | | | 85 | 0.20 | 707 |
| RD401R5K | 1.5 | | | | 70 | 0.22 | 674 |
| RD401R8K | 1.8 | | | | 60 | 0.22 | 674 |
| RD402R2K | 2.2 | | | | 55 | 0.25 | 632 |
| RD402R7K | 2.7 | | | | 50 | 0.27 | 608 |
| RD403R3K | 3.3 | | | | 45 | 0.30 | 577 |
| RD403R9K | 3.9 | | | | 40 | 0.32 | 559 |
| RD404R7K | 4.7 | | | 35 | 0.35 | 534 | |
| RD405R6K | 5.6 | | | 33 | 0.37 | 519 | |
| RD406R8K | 6.8 | | | 27 | 0.40 | 500 | |
| RD408R2K | 8.2 | | | 25 | 0.45 | 471 | |
| RD40100K | 10 | | | 2.52 | 20 | 0.80 | 353 |
| RD40120K | 12 | | | | 18 | 0.90 | 333 |
| RD40150K | 15 | | | | 17 | 1.0 | 316 |
| RD40180K | 18 | | | | 15 | 1.2 | 288 |
| RD40220K | 22 | | | | 13 | 1.4 | 267 |
| RD40270K | 27 | | | | 11 | 1.7 | 242 |
| RD40330K | 33 | | | | 10.5 | 2.0 | 223 |
| RD40390K | 39 | | | | 10.0 | 2.4 | 204 |
| RD40470K | 47 | | 9.5 | 2.7 | 192 | | |
| RD40560K | 56 | | 9.0 | 2.9 | 185 | | |
| RD40680K | 68 | | 8.5 | 3.1 | 179 | | |
| RD40820K | 82 | | 7.5 | 3.3 | 174 | | |
| RD40101K | 100 | | 0.796 | 6.8 | 3.3 | 174 | |
| RD40121K | 120 | | | 6.2 | 3.5 | 169 | |
| RD40151K | 150 | | | 5.7 | 3.7 | 164 | |
| RD40181K | 180 | | | 5.3 | 4.0 | 158 | |
| RD40221K | 220 | | | 4.0 | 5.2 | 138 | |
| RD40271K | 270 | | | 3.6 | 5.8 | 131 | |
| RD40331K | 330 | | | 3.3 | 6.5 | 124 | |
| RD40391K | 390 | | | 3.0 | 7.5 | 115 | |
| RD40471K | 470 | | 2.8 | 8.0 | 111 | | |
| RD40561K | 560 | | 2.4 | 12.5 | 89 | | |
| RD40681K | 680 | 2.2 | 14.0 | 84 | | | |
| RD40821K | 820 | 2.0 | 15.5 | 80 | | | |
| RD40102K | 1000 | 40 | 1.8 | 18.5 | 73 | | |
| RD40122K | 1200 | 30 | 1.7 | 29.0 | 58 | | |
| RD40152K | 1500 | | 1.5 | 34.0 | 54 | | |
| RD40182K | 1800 | | 1.4 | 37.0 | 51 | | |
| RD40222K | 2200 | | 1.2 | 32.0 | 48 | | |

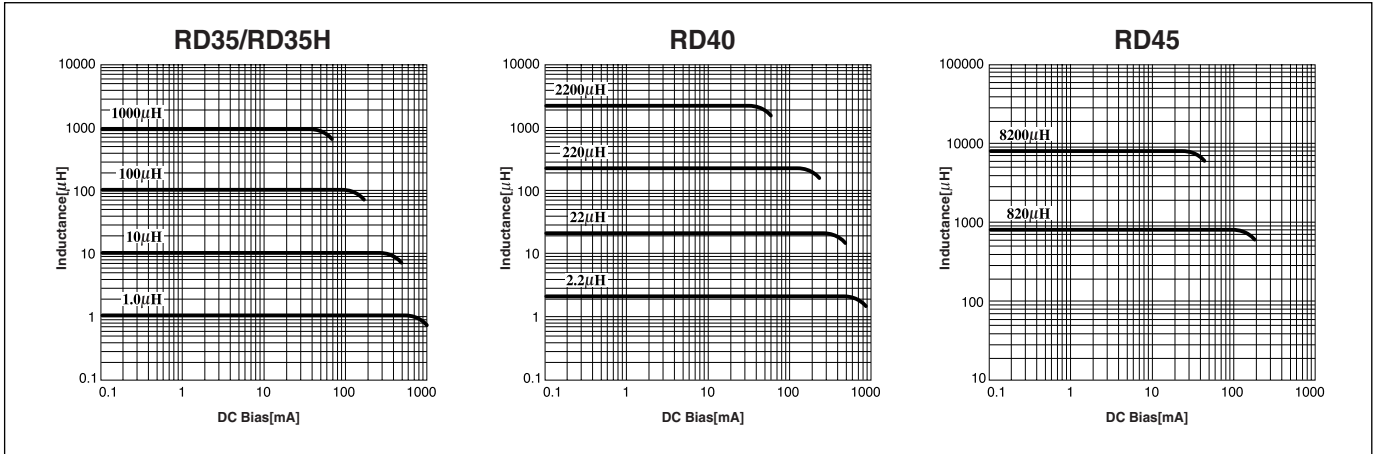
● RD45

| Ordering Code | Inductance [μ H] | Inductance Tolerance | Q (min.) | Measuring Frequency [MHz] | Self-Resonant Frequency [MHz] (min.) | DC Resistance [Ω] (max.) | Rated Current [mA] (max.) | |
|---------------|-----------------------|-----------------------------|----------|---------------------------|--------------------------------------|-----------------------------------|---------------------------|-----|
| RD45 100K | 10 | $\pm 10\%$ ($\pm 5\%$) | 20 | 2.52 | 17.0 | 0.19 | 780 | |
| RD45 120K | 12 | | | | 14.0 | 0.22 | 730 | |
| RD45 150K | 15 | | | | 12.0 | 0.24 | 650 | |
| RD45 180K | 18 | | | | 10.5 | 0.26 | 610 | |
| RD45 220K | 22 | | | | 10.0 | 0.29 | 540 | |
| RD45 270K | 27 | | | | 9.5 | 0.32 | 480 | |
| RD45 330K | 33 | | | | 8.5 | 0.34 | 440 | |
| RD45 390K | 39 | | | | 8.0 | 0.42 | 410 | |
| RD45 470K | 47 | | | | 7.0 | 0.47 | 375 | |
| RD45 560K | 56 | | | | 6.8 | 0.52 | 340 | |
| RD45 680K | 68 | | | | 15 | 6.5 | 0.58 | 320 |
| RD45 820K | 82 | | | | | 6.3 | 0.64 | 285 |
| RD45 101K | 100 | | 25 | 6.0 | 0.85 | 260 | | |
| RD45 121K | 120 | | | 5.4 | 1.00 | 240 | | |
| RD45 151K | 150 | | | 4.8 | 1.20 | 215 | | |
| RD45 181K | 180 | | 30 | 4.0 | 1.50 | 195 | | |
| RD45 221K | 220 | | | 3.9 | 1.65 | 180 | | |
| RD45 271K | 270 | | | 3.6 | 2.15 | 160 | | |
| RD45 331K | 330 | | 35 | 3.3 | 2.90 | 145 | | |
| RD45 391K | 390 | | | 3.0 | 3.25 | 135 | | |
| RD45 471K | 470 | | | 2.8 | 4.05 | 125 | | |
| RD45 561K | 560 | | 40 | 2.4 | 4.45 | 115 | | |
| RD45 681K | 680 | | | 2.2 | 5.85 | 105 | | |
| RD45 821K | 820 | | | 2.0 | 6.60 | 90 | | |
| RD45 102K | 1000 | | 45 | 1.8 | 8.90 | 85 | | |
| RD45 122K | 1200 | | | 1.7 | 10.5 | 75 | | |
| RD45 152K | 1500 | | | 1.5 | 11.9 | 70 | | |
| RD45 182K | 1800 | | | 1.3 | 16.5 | 60 | | |
| RD45 222K | 2200 | | | 1.2 | 19.0 | 58 | | |
| RD45 272K | 2700 | | | 40 | 0.8 | 32.0 | 52 | |
| RD45 332K | 3300 | | | | 0.7 | 34.0 | 48 | |
| RD45 392K | 3900 | | | | 0.7 | 38.0 | 45 | |
| RD45 472K | 4700 | | 0.6 | | 56.0 | 40 | | |
| RD45 562K | 5600 | 0.5 | 63.0 | | 37 | | | |
| RD45 682K | 6800 | 0.4 | 70.0 | 34 | | | | |
| RD45 822K | 8200 | 0.4 | 77.0 | 31 | | | | |
| RD45 103K | 10000 | 25 | 0.3 | 95.0 | 28 | | | |
| RD45 123K | 12000 | | 0.0796 | 0.2 | 110.0 | 25 | | |
| RD45 153K | 15000 | | | 20 | 0.1 | 160.0 | 21 | |

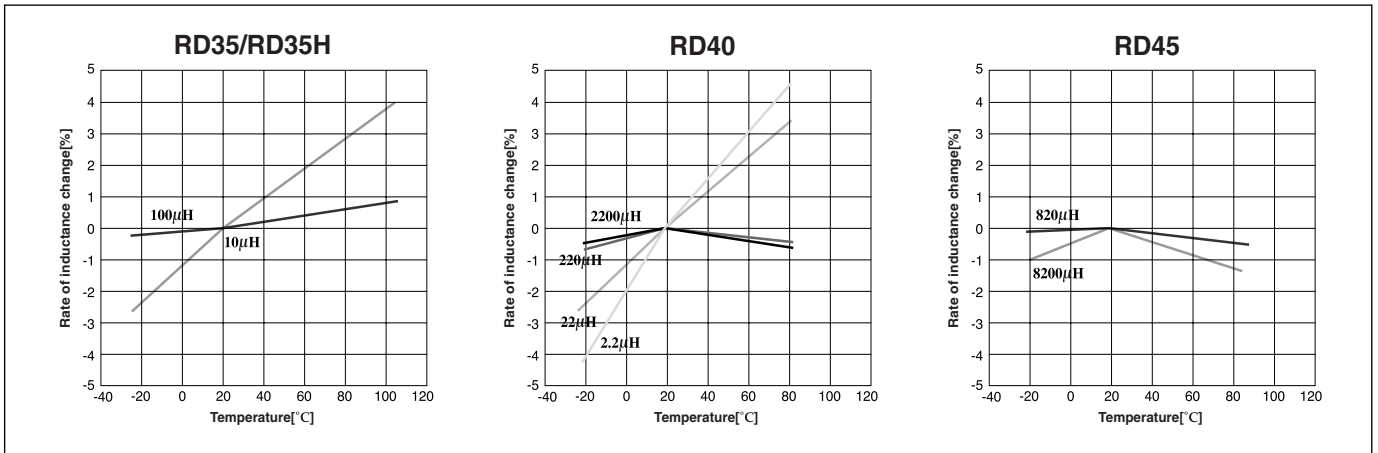
RADIAL LEADED INDUCTORS

ELECTRICAL CHARACTERISTICS

● DC Bias Characteristics (Measured by HP4284A + HP42841A)



● Temperature Characteristics (Measured by HP4284A + HP42841A)



● Q-Characteristics (Measured by HP 4285A + HP 42851A)

