

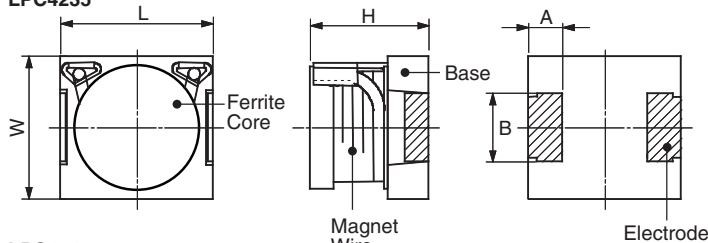


features

- Low DC resistance and high allowable current are realized by the original construction and wiring technology
- Automatic surface mounting is applicable
- Excellent solderability and endurance environment
- Suitable for reflow soldering
- Marking: Black body color with no marking
- Products meet EU RoHS requirements

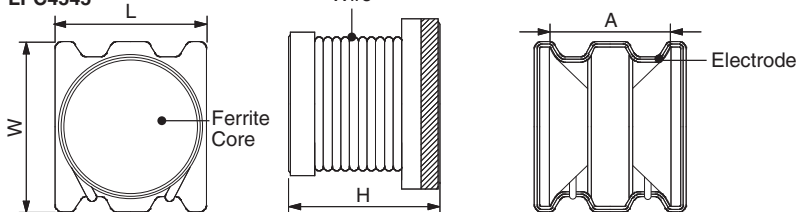
dimensions and construction

LPC4235



| Size | Dimensions inches (mm) | | | | |
|------|------------------------|------------------------|-------------------------|------------------------|------------------------|
| | L | W | H Max. | A | B |
| 4235 | .177±.008 (4.5±0.2) | .165±.008 (4.2±0.2) | .138 Max. (3.5 Max.) | .039±.008 (1.0±0.2) | .079±.008 (2.0±0.2) |
| 4545 | .161±.012 (4.1±0.3) | .181±.016 (4.6±0.4) | .181 Max. (4.6 Max.) | .126±.012 (3.2±0.3) | — |

LPC4545



ordering information

| New Part # | LPC | 4235 | T | TED | 221 | K |
|------------|------|--------------|---|--|------------------------|--------------------|
| | Type | Size | Termination Material | Packaging | Nominal Inductance | Tolerance |
| | | 4235 4545 | T: Sn (4235 only) C: Sn/Cu (4545 only) | TM: taping (4235) TE: taping (4545) | 3 digits 221: 220µH | K: ±10% M: ±20% |

For further information on packaging, please refer to Appendix A.

applications and ratings

Inductors

| Part Designation | Inductance (μH) | Inductance Tolerance | Self Resonant Frequency Minimum (MHz) | DC Resistance Maximum (Ω) | Allowable DC Current Maximum (Amps) |
|------------------|-----------------|----------------------|---------------------------------------|---------------------------|-------------------------------------|
| LPC4235TTM R82M | 0.82 | M: ±20% | 146.6 | 0.017 | 3.34 |
| LPC4235TTM 1R0M | 1.0 | | 125.1 | 0.020 | 3.27 |
| LPC4235TTM 1R2M | 1.2 | | 114.7 | 0.023 | 3.10 |
| LPC4235TTM 1R5M | 1.5 | | 101.4 | 0.031 | 2.53 |
| LPC4235TTM 2R2M | 2.2 | | 78.8 | 0.039 | 2.28 |
| LPC4235TTM 3R3M | 3.3 | | 66.7 | 0.070 | 1.63 |
| LPC4235TTM 4R7M | 4.7 | | 52.0 | 0.090 | 1.44 |
| LPC4235TTM 6R8M | 6.8 | | 43.5 | 0.109 | 1.29 |
| LPC4235TTM 100K | 10 | | 33.5 | 0.190 | 0.91 |
| LPC4235TTM 150K | 15 | K: ±10% | 29.1 | 0.230 | 0.87 |
| LPC4235TTM 220K | 22 | | 21.7 | 0.366 | 0.69 |
| LPC4235TTM 330K | 33 | | 13.9 | 0.542 | 0.52 |
| LPC4235TTM 470K | 47 | | 12.0 | 0.688 | 0.47 |
| LPC4235TTM 680K | 68 | | 12.7 | 1.30 | 0.34 |
| LPC4235TTM 101K | 100 | | 10.4 | 1.66 | 0.31 |
| LPC4235TTM 151K | 150 | | 7.5 | 2.96 | 0.22 |
| LPC4235TTM 221K | 220 | | 6.7 | 3.77 | 0.20 |
| LPC4545CTE 1R0M | 1.0 | | M: ±20% | 90.0 | 0.015 |
| LPC4545CTE 1R5M | 1.5 | 65.0 | | 0.02 | 3.21 |
| LPC4545CTE 2R2M | 2.2 | 50.0 | | 0.023 | 2.96 |
| LPC4545CTE 3R3M | 3.3 | 40.0 | | 0.044 | 2.19 |
| LPC4545CTE 4R7M | 4.7 | 35.0 | | 0.062 | 1.81 |
| LPC4545CTE 6R8M | 6.8 | 25.0 | | 0.075 | 1.60 |
| LPC4545CTE 100K | 10 | 23.0 | | 0.1 | 1.43 |
| LPC4545CTE 150K | 15 | 15.0 | | 0.15 | 1.04 |
| LPC4545CTE 220K | 22 | 13.0 | | 0.21 | 0.88 |
| LPC4545CTE 330K | 33 | K: ±10% | 10.0 | 0.41 | 0.60 |
| LPC4545CTE 470K | 47 | | 9.0 | 0.52 | 0.53 |
| LPC4545CTE 680K | 68 | | 7.5 | 0.67 | 0.49 |
| LPC4545CTE 101K | 100 | | 5.5 | 0.92 | 0.41 |
| LPC4545CTE 151K | 150 | | 5.0 | 1.8 | 0.29 |
| LPC4545CTE 221K | 220 | | 4.0 | 2.25 | 0.26 |
| LPC4545CTE 331K | 330 | | 2.5 | 4.27 | 0.19 |
| LPC4545CTE 471K | 470 | | 2.0 | 5.23 | 0.17 |
| LPC4545CTE 681K | 680 | | 1.8 | 6.67 | 0.15 |
| LPC4545CTE 152K | 1500 | 1.3 | 17.04 | 0.10 | |
| LPC4545CTE 222K | 2200 | 0.9 | 35.0 | 0.07 | |

Operating temperature range: -40°C – +125°C (the self-temperature rise is contained)

Allowable current is a DC Current which causes initial inductance to decrease by 10%. Or coil temperature to rise by 40°C, whichever is smaller

environmental applications

Performance Characteristics

| Parameter | Maximum Δ L | Test Method |
|-----------------------------|-------------|--|
| High Temperature Exposure | ±5% | +125°C ± 2°C, 1000 hours |
| Low Temperature Exposure | ±5% | -40°C, 1000 hours |
| Moisture Exposure | ±5% | +40°C ± 2°C, 90 - 95% RH, 1000 hours |
| Rapid Change of Temperature | ±5% | -40°C (30 minutes)/+125°C (30 minutes), 100 cycles |

Surface Temperature Rise graphs and additional environmental applications can be found at www.koaspeer.com

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

12/17/11