

ML252010QP SERIES – High Current Power Inductors

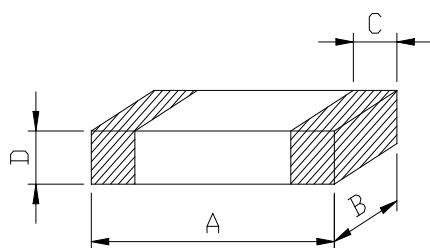


PART NUMBERING SYSTEM

| | | | | | |
|-----------|-----------------|---|-------------|---|-----------|
| ML | 252010QP | — | 2R2M | — | LF |
| TYPE | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

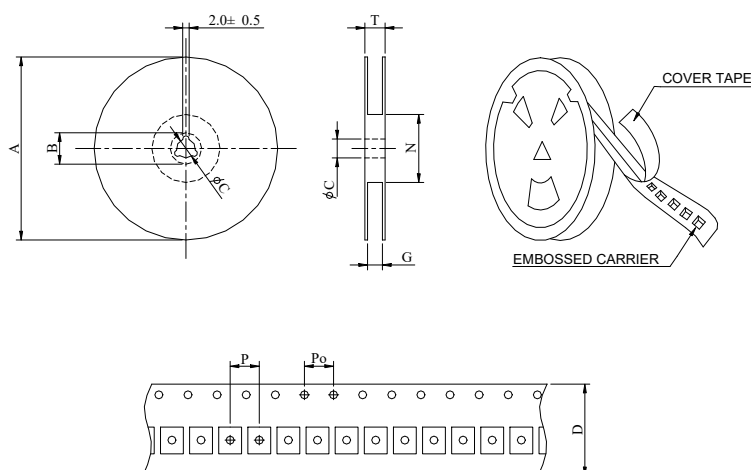
SHAPES AND DIMENSIONS

UNIT : mm



A= 2.5±0.3 B=2.0±0.3 C=0.6±0.3 D=1.0 Max.

PACKAGING SPECIFICATION



| SERIES | STAYLE | Q'TY (PCS) | DIMENSIONS (m/m) | | | | | | | | |
|------------|--------|------------|------------------|-------|-------|---|----------------|----------------|---|----|------|
| | | | A | B±0.8 | C±0.5 | D | G ⁺ | N ⁰ | P | Po | T |
| ML252010QP | 178 | 3,000 | 178 | 21 | 13 | 8 | 18 | 50 | 4 | 4 | 22.4 |



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SPECIFICATION TABLE

| PART NUMBER | INDUCTANCE (μ H) | DCR (m Ω) Max. (Typ.) | Isat(A) Max. (Typ.) | Irms(A) Max. (Typ.) | TEST FREQ. (MHz) |
|--------------------|-----------------------|----------------------------------|------------------------|------------------------|---------------------|
| ML252010QP-R22M-LF | 0.22 \pm 20% | 12.5 (9.0) | 7.20 (7.9) | 5.30 (5.9) | 1MHz/1V |
| ML252010QP-R33M-LF | 0.33 \pm 20% | 26.0 (21) | 6.00 (6.6) | 4.00 (4.4) | 1MHz/1V |
| ML252010QP-R47M-LF | 0.47 \pm 20% | 32.0 (27) | 4.50 (5.0) | 3.51 (3.9) | 1MHz/1V |
| ML252010QP-R68M-LF | 0.68 \pm 20% | 44.0 (37) | 3.87 (4.3) | 3.06 (3.4) | 1MHz/1V |
| ML252010QP-1R0M-LF | 1.00 \pm 20% | 54.0 (45) | 3.15 (3.5) | 2.70 (3.0) | 1MHz/1V |
| ML252010QP-1R5M-LF | 1.50 \pm 20% | 91.0 (76) | 2.34 (2.6) | 2.25 (2.5) | 1MHz/1V |
| ML252010QP-2R2M-LF | 2.20 \pm 20% | 119.0 (99) | 2.16 (2.4) | 2.07 (2.3) | 1MHz/1V |
| ML252010QP-4R7M-LF | 4.70 \pm 20% | 262.0 (220) | 1.62 (1.8) | 1.22 (1.36) | 1MHz/1V |

FEATURES

1. **Magnetic shielding** allows high-density mounting
2. **Ultra-small shielded power inductor** – only 1 mm high, 2.5× 2 mm footprint
3. Handles **current up to 7.2 Amps**
4. Excellent mounting strength by SMD chip making
5. **Isat** means that DC current will cause a **30% inductance reduction** from initial value .
6. **Irms** means that DC current will cause **coil temperature rising to 40°C** whichever is smaller.
7. **RoHS-compliant**. 260°C compatible.
8. Operating Temperature Range : -40°C to +125°C