

## ML252012QP SERIES – High Current Power Inductors

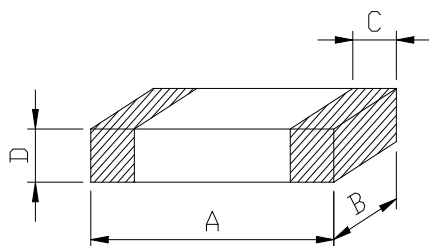


### PART NUMBERING SYSTEM

<b>ML</b>	<b>252012QP</b>	—	<b>4R7M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

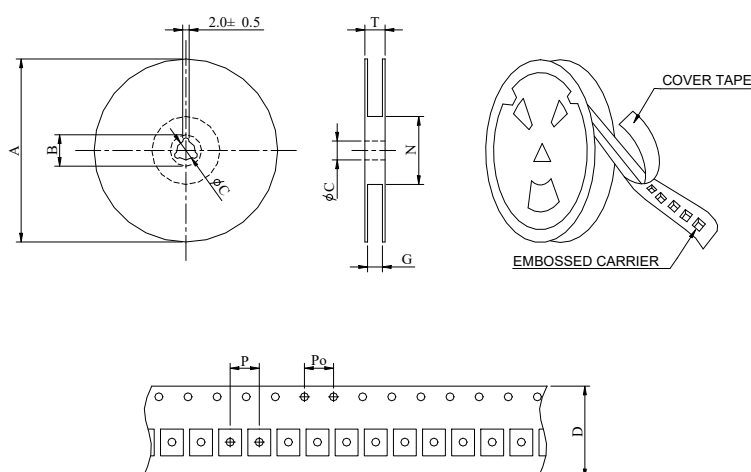
### SHAPES AND DIMENSIONS

UNIT : mm



A= 2.5±0.3    B=2.0±0.3    C=0.6±0.3    D=1.2 Max.

### PACKAGING SPECIFICATION



SERIES	STAYLE	Q'TY (PCS)	DIMENSIONS (m/m)								
			A	B±0.8	C±0.5	D	G <sup>+</sup>	N <sup>0</sup>	P	Po	T
ML252012QP	178	3,000	178	21	13	8	18	50	4	4	22.4



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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	DCR (m $\Omega$ ) Max. (Typ.)	Isat(A) Max. (Typ.)	Irms(A) Max. (Typ.)	TEST FREQ. (MHz)
ML252012QP-R47M-LF	0.47 $\pm$ 20%	25.0 (21)	4.95 (5.3)	4.18 (4.60)	1MHz/1V
ML252012QP-R68M-LF	0.68 $\pm$ 20%	35.0 (29)	4.63 (5.0)	3.36 (3.70)	1MHz/1V
ML252012QP-1R0M-LF	1.00 $\pm$ 20%	49.0 (41)	4.04 (4.4)	3.18 (3.50)	1MHz/1V
ML252012QP-1R5M-LF	1.50 $\pm$ 20%	77.0 (64)	2.91 (3.2)	2.27 (2.50)	1MHz/1V
ML252012QP-2R2M-LF	2.20 $\pm$ 20%	98.0 (85)	2.73 (3.0)	2.06 (2.27)	1MHz/1V
ML252012QP-4R7M-LF	4.70 $\pm$ 20%	235.0 (196)	1.58 (1.9)	1.40 (1.61)	1MHz/1V
ML252012QP-6R8M-LF	6.80 $\pm$ 20%	375.0 (319)	1.30 (1.45)	1.00 (1.10)	1MHz/1V
ML252012QP-100M-LF	10.0 $\pm$ 20%	460.0 (391)	0.91 (1.00)	0.85 (0.94)	1MHz/1V

### FEATURES

1. **Magnetic shielding** allows high-density mounting
2. **Ultra-small shielded power inductor** – only **1.2 mm** high, **2.5× 2 mm** footprint
3. Handles **current up to 5.3 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