



Miniature High Current Inductors ~ ML252012QP

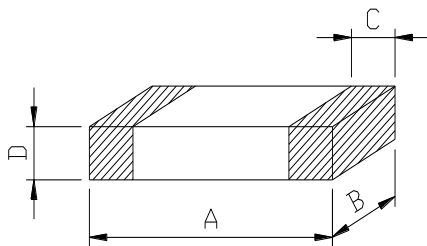


PART NUMBERING SYSTEM

<u>ML</u>	<u>252012QP</u>	—	<u>4R7M</u>	—	<u>LF</u>
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.

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. Operating Temperature Range : -40°C to +125°C
6. **Automotive grade available**
7. Halogen free and REACH / RoHS-compliant.

APPLICATIONS

Ideally used in smart phone, tablet PC,SSD, USB3.0 and other low profile high current application.



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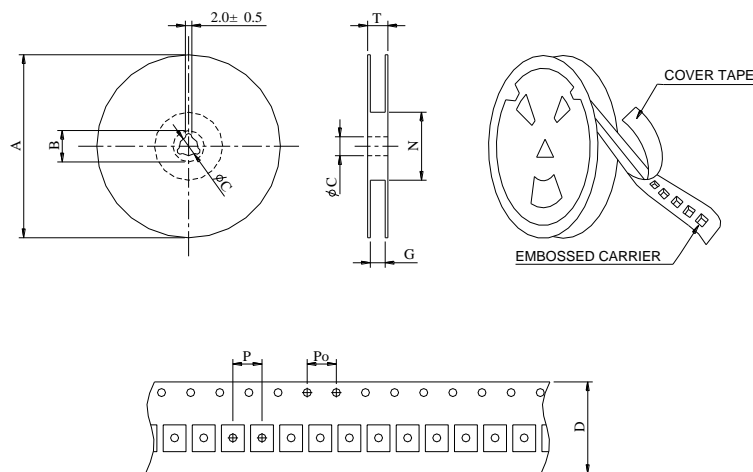
SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) Max.	Isat(A) Max. (Typ.)	Irms(A) Max. (Typ.)	TEST FREQ. (MHz)
ML252012QP-R47M-LF	0.47 \pm 20%	25.0	5.3	4.6	1MHz/1V
ML252012QP-R68M-LF	0.68 \pm 20%	35.0	5.0	3.7	1MHz/1V
ML252012QP-1R0M-LF	1.00 \pm 20%	49.0	4.4	3.5	1MHz/1V
ML252012QP-1R5M-LF	1.50 \pm 20%	77.0	3.2	2.5	1MHz/1V
ML252012QP-2R2M-LF	2.20 \pm 20%	98.0	3.0	2.27	1MHz/1V
ML252012QP-3R3M-LF	3.30 \pm 20%	150.0	2.1	2.40	1MHz/1V
ML252012QP-4R7M-LF	4.70 \pm 20%	235.0	1.9	1.61	1MHz/1V
ML252012QP-6R8M-LF	6.80 \pm 20%	375.0	1.45	1.1	1MHz/1V
ML252012QP-100M-LF	10.0 \pm 20%	450.0	1.1	0.88	1MHz/1V

Isat means that DC current will cause a **30% inductance reduction** from initial value .

Irms means that DC current will cause **coil temperature rising to 40°C** whichever is smaller.

PACKAGING SPECIFICATION



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