



Molding High Current Inductors - ML322512EM SERIES

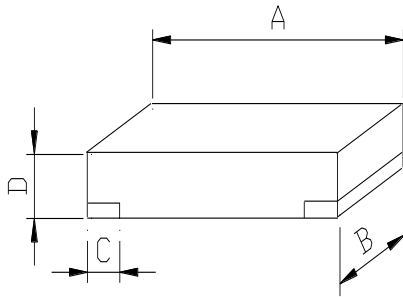


PART NUMBERING SYSTEM

ML	322512EM	—	2R2M	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

UNIT : mm



A= 3.2±0.3 B=2.5±0.3 C=1.05±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, 3.5× 2.5 mm footprint
3. Handles **current up to 18.0 Amps**
4. Excellent mounting strength by SMD chip making
5. **RoHS-compliant.** 260°C compatible.
6. Operating Temperature Range : -40°C to +125°C
7. Automotive grade available
8. Low loss realized with low DCR.
9. High performance realized by metal dust core.
10. Ultra low buzz noise, due to composite construction.



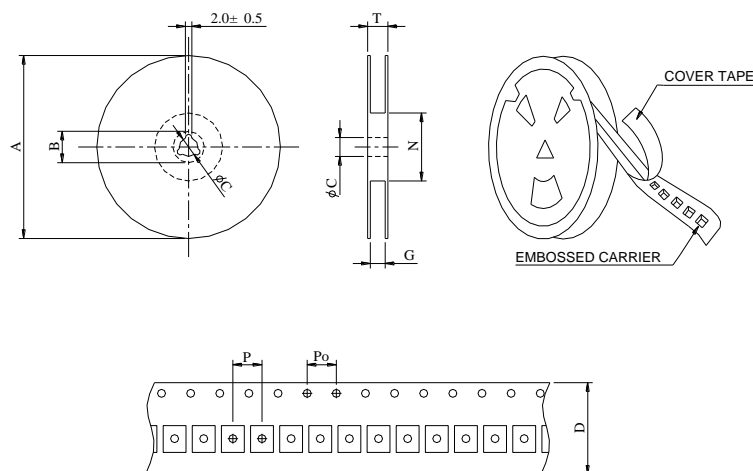
SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	DCR (m Ω) Max.	Isat(A) Typ.	Irms(A) Typ.	TEST FREQ. (MHz)
ML322512EM-R10M-LF	0.10 \pm 20%	7.0	18.0	12.0	1MHz/1V
ML322512EM-R22M-LF	0.22 \pm 20%	10.0	11.5	9.2	1MHz/1V
ML322512EM-R33M-LF	0.33 \pm 20%	14.0	10.0	8.4	1MHz/1V
ML322512EM-R47M-LF	0.47 \pm 20%	19.0	8.6	7.5	1MHz/1V
ML322512EM-R68M-LF	0.68 \pm 20%	23.0	8.1	7.3	1MHz/1V
ML322512EM-1R0M-LF	1.0 \pm 20%	30.0	6.6	5.3	1MHz/1V
ML322512EM-1R5M-LF	1.5 \pm 20%	44.0	5.1	4.7	1MHz/1V
ML322512EM-2R2M-LF	2.2 \pm 20%	50.0	5.0	4.2	1MHz/1V
ML322512EM-3R3M-LF	3.3 \pm 20%	67.0	3.7	2.9	1MHz/1V
ML322512EM-4R7M-LF	4.7 \pm 20%	120.0	3.0	2.5	1MHz/1V
ML322512EM-6R8M-LF	6.8 \pm 20%	210.0	2.8	2.1	1MHz/1V
ML322512EM-100M-LF	10.0 \pm 20%	230.0	2.3	2.2	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
ML322512EM	178	3,000	178	21	13	8	18	50	4	4	22.4

Our specification limit the quality of the component to a single unit. Please ensure the component is thoroughly evaluated in your application circuit
 All specifications are subject to change without notice.

Revised APRIL 2024