

## FEATURES

These are compact inductors for power line, considerably smaller compared to inductors with comparable characteristics.

They feature low coil resistance, making them suitable for large currents.

This product does not contain regulated substances that are slated to be included in RoHS.

## APPLICATIONS

Ideal for a variety of DC/DC converter inductor applications. Portable communication equipment. Computer Peripherals For mobile phones, hard disk drives and DSCs.

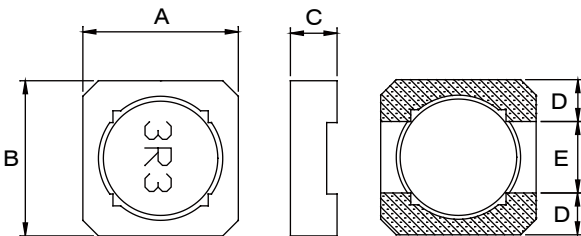
## PRODUCT IDENTIFICATION

1    2    3    4    5  
 MLPS - 3010 - 100M □ □

- ① Product Code
- ② Dimensions Code
- ③ Inductance Code
- ④ Tolerance Code
- ⑤ Pattern Code

## PRODUCT SERIES

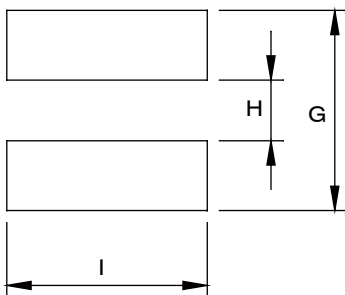
Dimension in mm



Part No.	A	B	C	D	E
MLPS-3010	3.0±0.2	3.0±0.2	1.0Max.	0.9Typ.	1.2Typ.
MLPS-3015	3.0±0.2	3.0±0.2	1.5Max.	0.9Typ.	1.2Typ.
MLPS-4012	4.0±0.2	4.0±0.2	1.2Max.	1.1Typ.	1.8Typ.
MLPS-4018	4.0±0.2	4.0±0.2	1.8Max.	1.1Typ.	1.8Typ.
MLPS-4020	4.0±0.2	4.0±0.2	2.0Max.	1.1Typ.	1.8Typ.
MLPS-5010	5.0±0.2	5.0±0.2	1.0Max.	1.75Typ.	1.5Typ.
MLPS-5015	5.0±0.2	5.0±0.2	1.5Max.	1.75Typ.	1.5Typ.

## LAND PATTERNS

Dimension in mm



Part No.	G	H	I
MLPS-3010	3.3	1.0	3.3
MLPS-3015	3.3	1.0	3.3
MLPS-4012	4.4	1.8	4.4
MLPS-4018	4.4	1.8	4.4
MLPS-4020	4.4	1.8	4.4
MLPS-5010	5.4	1.5	5.4
MLPS-5015	5.4	1.5	5.4

**■ PRODUCT SPECIFICATIONS**

Part No.	Inductance ( $\mu$ H)	DC Resistance( $\Omega$ )Max.							Permissible DC Current(A)Max.						
		3010	3015	4012	4018	4020	5010	5015	3010	3015	4012	4018	4020	5010	5015
R47	0.47	70m							2.30						
R56	0.56				30m						2.80				
1R0	1.0	85m	75m	60m	40m			50m	1.60	2.00	2.40	2.70			2.65
1R2	1.2							50m	1.30	1.80					2.65
1R5	1.5	0.12	0.10	70m	50m		72m	65m	1.30	1.70	2.20	2.50		1.40	2.35
1R8	1.8	0.15	0.10					75m	1.20	1.40					2.15
2R2	2.2	0.22	0.11	0.10	70m	59m	0.100	90m	1.10	1.40	1.75	2.30	1.72	1.20	2.00
3R3	3.3	0.22	0.13	0.13	80m	78m	0.125	0.125	0.82	1.30	1.45	2.00	1.52	1.10	1.80
4R7	4.7	0.30	0.20	0.175	0.125	98m	0.175	0.150	0.72	1.10	1.30	1.60	1.24	0.98	1.62
5R6	5.6	0.40		0.26			0.240	0.175	0.66		1.10			0.90	1.45
6R8	6.8	0.45	0.30	0.34	0.15	0.131	0.255	0.225	0.62	0.90	0.98	1.20	1.05	0.84	1.25
8R2	8.2	0.50						0.280	0.55						1.05
100	10	0.54	0.44	0.35	0.20		0.35	0.300	0.51	0.65	0.70	1.10		0.68	0.95
120	12	0.70						0.350	0.45						0.84
150	15	0.95	0.70	0.55			0.50	0.360	0.40	0.55	0.60			0.55	0.70
180	18	1.00	0.75					0.550	0.37	0.53					0.65
220	22	1.20	0.825				0.67	0.675	0.33	0.49				0.45	0.65
330	33	2.00	1.30				1.05	0.750	0.27	0.42				0.38	0.50
470	47	3.20	1.55		0.65		1.45	1.00	0.24	0.32		0.50		0.30	0.45
560	56							1.13							0.40
680	68		2.25				2.00	1.45		0.28				0.26	0.38
101	100		3.40			1.40	3.10	1.95		0.23			0.26	0.22	0.28
121	120						3.50	2.50						0.20	0.28
151	150						4.25	3.40						0.18	0.24
181	180														
221	220						6.25	4.50						0.15	0.20
331	330						8.60	7.40						0.12	0.165
471	470						12.7	7.50						0.09	0.120
561	560						15.7	8.50						0.085	0.110
681	680							10.6							1.100
102	1000				16.5							0.10			

1. TEST FREQ.(L) : @100KHz/100mV
2. TOLERANCE OF INDUCTANCE: 1.2~8.2  $\mu$  H  $\pm$  30%(N), 10~1000  $\mu$  H  $\pm$  20%(M)
3. The max. permissible DC current is the DC current applied which causes 30% reduction of its initial inductance value, or the coil temperature to rise by 40°C, whichever is lower.