FEATURES

- Low profile and thin thickness.
- Monolithic structure for high reliability.
- Closed magnetic circuit design reduces leakage flux and EMI.
- Operating temperature:-40℃ ~ +85℃.

APPLICATIONS

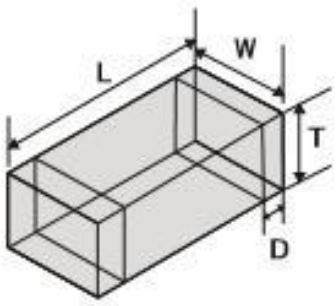
- DC-DC converter circuits for mobile phones, wearable devices, DVCs, HDDs, etc.

PRODUCT IDENTIFICATION

MCPI	201609	S	1R0	M	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name
(2) Product dimensions
(3) Feature Type (S: Standard Type)
(4) Inductance Value (1R0:1.0uH，100:10uH，101:100uH)
(5) Inductance Tolerance(K:10%，M:20%，N:30%)
(6) Package(T:Tape&Reel)

SHAPE AND DIMENSIONS



Series	L	W	T	D
MCPI160808	1.6±0.2	0.8±0.2	0.8±0.2	0.3±0.2
MCPI201209	2.0±0.2	1.2±0.2	0.9±0.2	0.5±0.3
MCPI201609	2.0±0.2	1.6±0.2	0.9±0.2	0.5±0.3
MCPI252010	2.5±0.2	2.0±0.2	1.0±0.2	0.5±0.3

Unit:mm

SPECIFICATIONS

MCPI160808 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR (Ω)	SRF Min. (MHz)	Irms (mA)
MCPI160808SR47MT	0.47	20	1MHz/1V	0.10±30%	100	1050
MCPI160808SR56MT	0.56	20	1MHz/1V	0.12±30%	100	1050
MCPI160808S1R0MT	1.0	20	1MHz/1V	0.20±30%	98	900
MCPI160808S1R8MT	1.8	20	1MHz/1V	0.24±30%	95	750
MCPI160808S2R2MT	2.2	20	1MHz/1V	0.24±30%	95	750
MCPI160808S4R7MT	4.7	20	1MHz/1V	0.50±30%	65	700

MCPI201209 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR (Ω)	SRF Min. (MHz)	Irms (mA)
MCPI201209S1R0MT	1.0	20	1MHz/1V	0.11±25%	75	1150
MCPI201209S2R2MT	2.2	20	1MHz/1V	0.20±25%	50	950
MCPI201209S3R3MT	3.3	20	1MHz/1V	0.22±25%	35	800
MCPI201209S4R7MT	4.7	20	1MHz/1V	0.30±25%	25	750
MCPI201209S6R8MT	6.8	20	1MHz/1V	0.30±25%	25	600

MCPI201609 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR (Ω)	SRF Min. (MHz)	Irms (mA)
MCPI201609S1R0MT	1.0	20	1MHz/1V	0.10±25%	70	1400
MCPI201609S2R2MT	2.2	20	1MHz/1V	0.16±25%	50	1200
MCPI201609S3R3MT	3.3	20	1MHz/1V	0.20±25%	40	1200
MCPI201609S4R7MT	4.7	20	1MHz/1V	0.26±25%	30	1100

MCPI252010 Series

Part Number	Inductance (μH)	Tolerance (%)	Test Condition	DCR (Ω)	SRF Min. (MHz)	Irms (mA)
MCPI252010S1R0MT	1.0	20	1MHz/1V	0.06±25%	70	1600
MCPI252010S2R2MT	2.2	20	1MHz/1V	0.10±25%	55	1300
MCPI252010S3R3MT	3.3	20	1MHz/1V	0.14±25%	30	1200
MCPI252010S4R7MT	4.7	20	1MHz/1V	0.18±25%	25	1100
MCPI252010S6R8MT	6.8	20	1MHz/1V	0.22±25%	25	1000

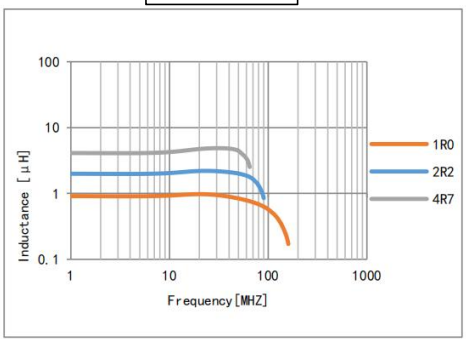
Note：

Irms：DC current that causes the temperature rise(ΔT=40℃) from 25℃ ambient.

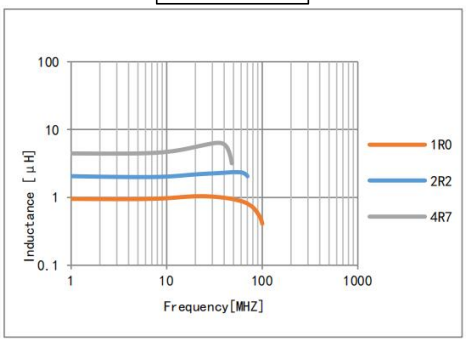
TYPICAL ELECTRICAL CHARACTERISTICS

Inductance vs.Frequency Characteristics

MCPI1608



MCPI2012



MCPI2016