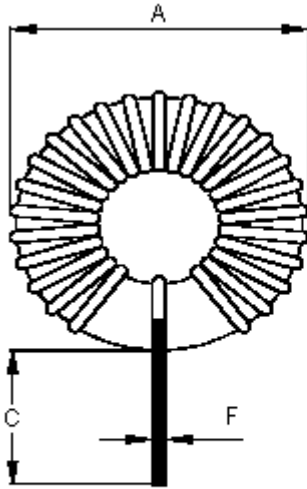
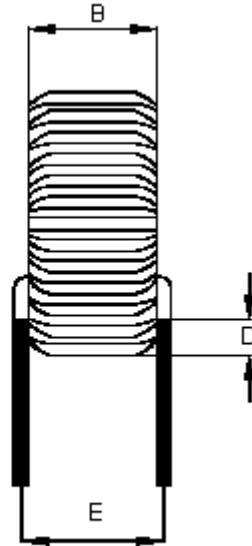


ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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## Configurations and Dimensions



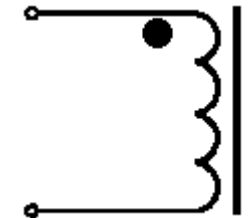
Front View



Side View

A	15 mm	(Max.)
B	8 mm	(Max.)
C	12 ±1 mm	-
D	1 mm	(Min.)
E	7 ±1 mm	-
F	Ø0.3 mm	(Ref.)

## Schematic Diagram



### Note:

1. Wire UEFN/U (155°C) Ø0.3mm
2. 51TS (Reference) C.W



## Electrical Characteristics

Test Condition		
10 KHz / 5 mA	L	109 µH ±20%
T <sub>a</sub> = 25°C	DCR	300 mΩ (Max.)
10 KHz / 5 mA I <sub>rms</sub> = 0.5 A	ΔT	Temperature rise 40°C (Max.)

Operating temperature : -55°C to +130°C

## Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	15 (Max.)	8 (Max.)	12 ±1	1 (Min.)	7 ±1	Ø0.3 (Ref.)
1	13.68	7.18	12.62	2.02	6.94	0.29
2	13.88	7.06	11.68	1.14	6.86	0.3
3	13.75	7.02	11.92	1.9	6.8	0.28
4	13.78	7.06	11.22	2.04	6.98	0.27
5	13.66	7.22	11.48	1.36	7.04	0.3
Average	13.75	7.11	11.78	1.69	6.92	0.29

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### DRAWING TITLE:

## Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002637	MCAP105228050A-101MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



PART NO.

MCAP105228050A-101MU

## REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SHA	20/4/11	SID	20/4/11		04/5/11

## Test Data for Electrical

Test Item	L $\mu$ H	DCR m $\Omega$	$\Delta$ T
Condition	10 KHz / 5 mA	T <sub>a</sub> = 25°C	10 KHz / 5 mA I <sub>rms</sub> = 0.5 A
Specification	109 $\pm$ 20%	300 (Max.)	Temperature rise 40°C (Max.)
1	111	251	OK
2	117.8	245	
3	112.5	249.8	
4	115.4	250.3	
5	116.4	243.3	
Average	114.62	247.88	OK

## Reliability Test

Test Item	Specifications	Test Method and Remarks
Operating temperature range	-55°C to +130°C	Including temperature rise due to self-generated heat.
Storage condition	Ambient temperature : 0°C to 40°C Humidity : Below 70% RH	To maintain the solderability of terminal electrodes, care must be taken to control temperature and humidity in the storage area.
Moisture sensitivity	Appearance : No abnormality No damage DCR change : Within $\pm$ 5% Inductance change : Within $\pm$ 5%	According to J-STD-020B level 3 Test condition : 60°C 60% RH Test duration : 40 hrs Recovery : 1 to 2 hours of recovery under the standard condition after the removal from the test chamber.
Solderability	All termination shall exhibit a continuous solder coating free from defects for a minimum of 95% of the surface area of any individual lead.	According to J-STD-002B Steam aging category : 97°C 98% RH Steam aging duration : 8 hrs Solder : Lead-free solder Solder temperature : 260 $\pm$ 5°C Dip time : 5 +0 / -0.5 s

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DRAWING TITLE:

## Inductor

SIZE  
A

DWG NO.

M10002637

ELECTRONIC FILE

MCAP105228050A-101MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCAP105228050A-101MU

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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Material List

No	Item	Material Description
1	Core	T50B-75-TAF200 (Red / White)
2	Wire	Ø0.3 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 100µH, 20%, 2 Pins	MCAP105228050A-101MU

<http://www.element14.com>

<http://www.farnell.com>

<http://www.newark.com>

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DATE:

20/04/11

DATE:

04/05/11

DRAWING TITLE:

Inductor

SIZE  
A

DWG NO.

M10002637

ELECTRONIC FILE

MCAP105228050A-101MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 3