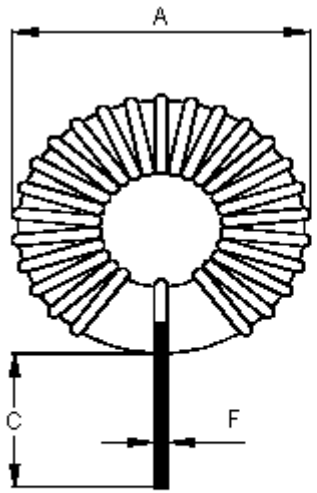
multicomp

PART NO.

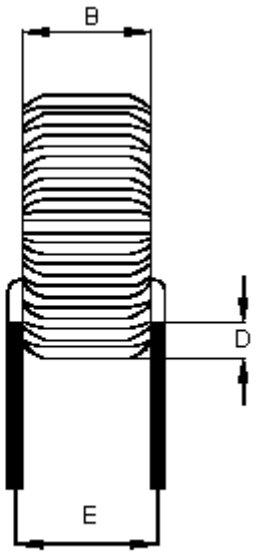
MCAP105228050A-101MU

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

Configurations and Dimensions



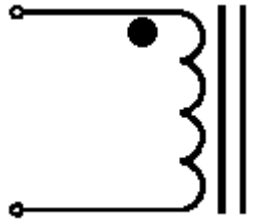
Front View



Side View

A	15 mm	(Max.)
B	8 mm	
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

RoHS Compliant

Electrical Characteristics

Test Condition		
10 KHz / 5 mA	L	109 µH ±20%
T_a = 25°C	DCR	300 mΩ (Max.)
10 KHz / 5 mA I_{rms} = 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**

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
SHA	20/04/11
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SID	20/04/11
APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE: **Inductor**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002637	MCAP105228050A-101MU	A

SCALE: NTS | U.O.M.: mm | SHEET: 1 OF 3

multicomp

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 μH	DCR mΩ	ΔT
Condition	**10 KHz / 5 mA**	**T_a = 25°C**	**10 KHz / 5 mA I_{rms} = 0.5 A**
Specification	**109 ±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 ±5% Inductance change : Within ±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 ±5°C Dip time : 5 +0 / -0.5 s

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DRAWING TITLE: **Inductor**

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		-	A	RELEASED	SHA	20/4/11	SID	20/4/11		04/5/11

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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DRAWING TITLE: **Inductor**

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