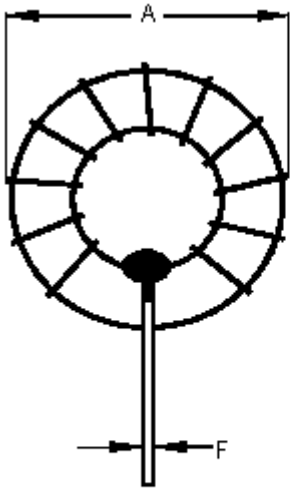
multicomp

PART NO.

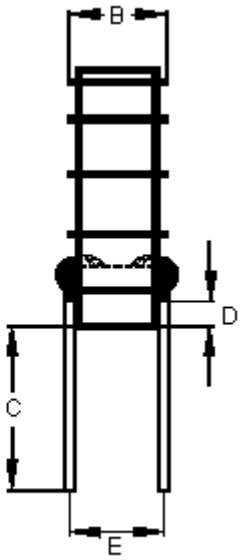
MCAP105422025A-400MU

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

Configurations and Dimensions



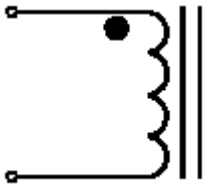
Front View



Side View

A	16 mm	(Max.)
B	12 mm	
C	$2.2^{+0.7}_{-0.0}$ mm	-
D	1 mm	(Min.)
E	11 ±2 mm	-
F	Ø0.65 mm	(Ref.)

Schematic Diagram



Note:

1. Wire UEFN/U (155°C) Ø0.65mm
2. 25TS (Reference) C.W

RoHS Compliant

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	**16 (Max.)**	**12 (Max.)**	**$2.2^{+0.7}_{-0.0}$**	**1 (Min.)**	**11 ±2**	**Ø0.65 (Ref.)**
1	15.18	11.2	2.57	1.58	11.07	0.63
2	15.22	11.18	2.65	1.69	11.23	
3	15.17	11.15	2.78	1.75	10.89	0.64
4	15.25	11.24	2.64	1.65	10.95	
5	15.21	11.17	2.56	1.85	11.14	0.63
Average	**15.21**	**11.19**	**2.64**	**1.7**	**11.06**	**0.63**

Electrical Characteristics

Test Condition		
1 KHz / 0.25 V	L	40 µH ±20%
T_a = 25°C	DCR	60 mΩ (Max.)
1 KHz / 0.25 V I_{rms} = 2 A	ΔT	Temperature rise 40°C (Max.)

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

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
SHA	20/04/11
CHECKED BY:	DATE:
ASH	20/04/11
APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE: **Inductor**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002637	MCAP105422025A-400MU	A

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

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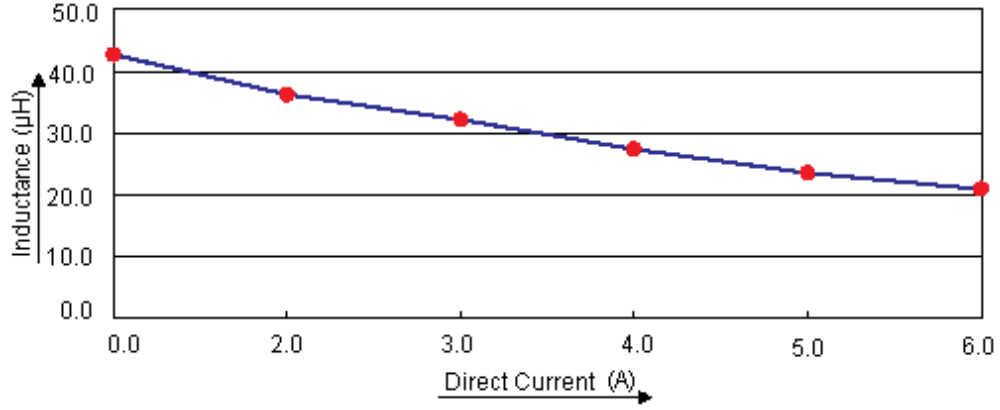
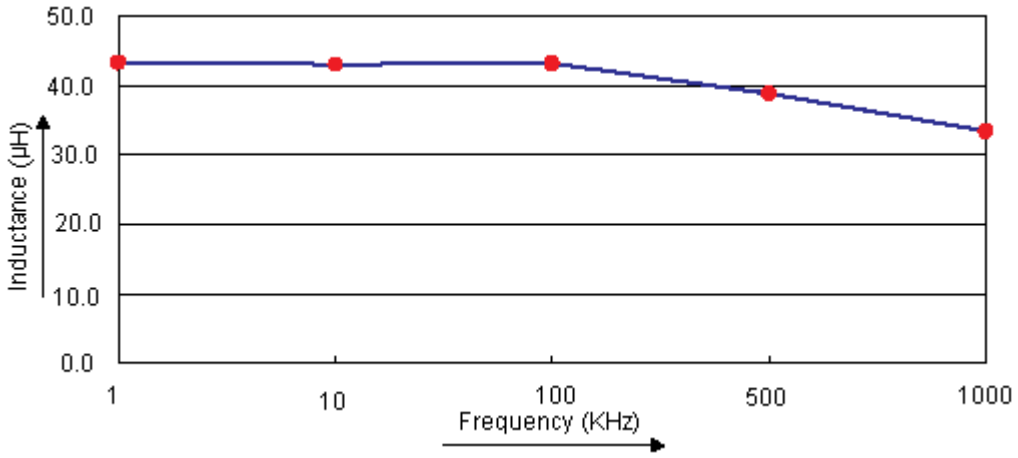
PART NO.

MCAP105422025A-400MU

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

Electric Characteristics





Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	**1 KHz / 0.25 V**	**T_a = 25°C**	**1 KHz / 0.25 V I_{rms} = 2 A**
Specification	**40 ±20%**	**60 (Max.)**	**Temperature rise 40°C (Max.)**
1	43.93	37.53	OK
2	42.77	36.89	
3	44.31	37.48	
4	42.71	37.06	
5	43.37	37.18	
Average	**43.42**	**37.23**	**OK**

TOLERANCES:

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CHECKED BY:	DATE:
ASH	20/04/11
APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE: **Inductor**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002637	MCAP105422025A-400MU	A

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PART NO.

MCAP105422025A-400MU

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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

Material List

No.	Item	Material Description
1	Core	T50D-75-TAF200 (Red / White)
2	Wire	Ø0.65 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%
4	Glue	TH100A / TH100B

Part Number Table

Description	Part Number
Inductor, 40µH, 20%, 2 Pins	MCAP105422025A-400MU

http://www.element14.com

http://www.farnell.com

http://www.newark.com

TOLERANCES:

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ASH	20/04/11
APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE: **Inductor**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002637	MCAP105422025A-400MU	A

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