



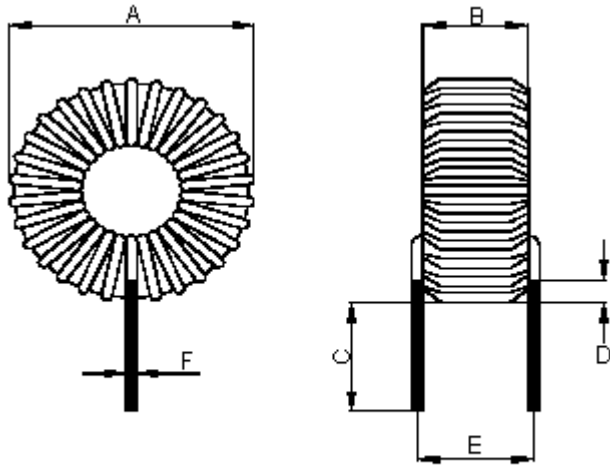
PART NO.

MCAP106020040A-900MU

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

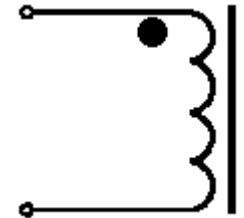


Front View

Side View

A	18.5 mm	(Max.)
B	10.5 mm	(Max.)
C	15 ±2 mm	-
D	1 mm	(Min.)
E	7.5 ±2 mm	-
F	Ø0.8 mm	(Ref.)

Schematic Diagram



Note:

1. Wire UEFN/U (155°C) Ø0.8mm
2. 42TS (Reference) C.W



Electrical Characteristics

Test Condition		
10 KHz / 5 mA	L	90 µH ±20%
T _a = 25°C	DCR	40 mΩ (Max.)
10 KHz / 5 mA I _{rms} = 3 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	18.5 (Max.)	10.5 (Max.)	15 ±2	1 (Min.)	7.5 ±2	Ø0.8 (Ref.)
1	18.05	9.53	15.5	1.3	7.8	0.8
2	18.12	9.52		1.5	7.1	
3	18.02	9.58	1.6	7.4		
4	18.1	9.5	1.2	7.1		
5	18.03	9.62	1.3	7.77		
Average	18.06	9.55	15.7	1.38	7.43	0.8

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04/05/11

DRAWING TITLE:

Inductor

SIZE
A

DWG NO.

M10002638

ELECTRONIC FILE

MCAP106020040A-900MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCAP106020040A-900MU

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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} = 3 A
Specification	90 ±20%	40 (Max.)	Temperature rise 40°C (Max.)
1	90.25	38.75	OK
2	92.24	38.62	
3	94.25	38.85	
4	92.3	39.01	
5	90.95	38.75	
Average	92	38.8	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

SIZE A	DWG NO. M10002638	ELECTRONIC FILE MCAP106020040A-900MU	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 2 OF 3	



PART NO.

MCAP106020040A-900MU

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Material List

No	Item	Material Description
1	Core	T60-75-TAF200 (Red / White)
2	Wire	Ø0.8 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 90µH, 20%, 2 Pins	MCAP106020040A-900MU

<http://www.element14.com>

<http://www.farnell.com>

<http://www.newark.com>

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ELECTRONIC FILE
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REV
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SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 3