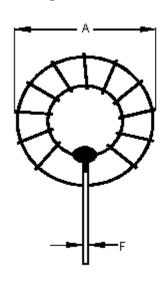


PART NO.

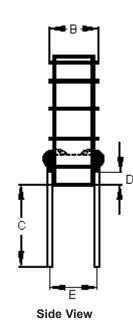
### MCAP105422025A-400MU

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

## **Configurations and Dimensions**



**Front View** 



Α	16 mm	(Max.)
В	12 mm	(IVIAX.)
С	2.2 <sup>+0.7</sup> <sub>-0.0</sub> mm	-
D	1 mm	(Min.)
Е	11 ±2 mm	-
F	Ø0.65 mm	(Ref.)

# **Schematic Diagram**





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

# **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	0.03
3	15.17	11.15	2.78	1.75	10.89	0.64
4	15.25	11.24	2.64	1.65	10.95	0.64
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 <sub>a</sub> = 25°C	DCR	60 mΩ (Max.)
1 KHz / 0.25 V I <sub>rms</sub> = 2 A	ΔΤ	Temperature rise 40°C (Max.)

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

Important Notice: I his data sneet and its contents (the "Information") belong to the members of the Premier Farmell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Famell plz 2011.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

**TOLERANCES:** 

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

DRAWI	NG TITLE:						
Inductor							
SIZE A	DWG NO. M10002637			TRONIC FIL P105422025A		ΛU	REV A
SCALE: NTS		U.O.M.: mm		SHEET:	1	OF	3

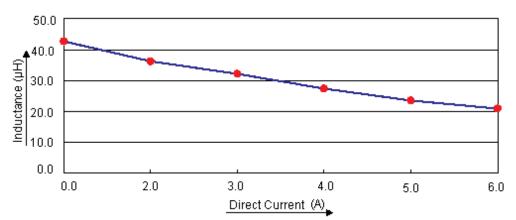


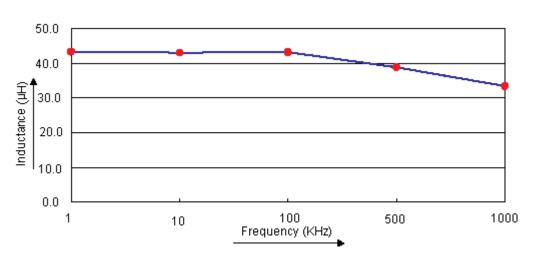
PART NO.

#### MCAP105422025A-400MU

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

#### **Electric Characteristics**





#### **Test Data for Electrical**

SCALE: NTS

rest Data for Electrical						
Test Item	L µH	${\displaystyle  \begin{array}{c} DCR \\ m\Omega \end{array}}$	ΔΤ			
Condition	1 KHz / 0.25 V	T <sub>a</sub> = 25°C	1 KHz / 0.25 V I <sub>rms</sub> = 2 A			
Specification	40 ±20%	60 (Max.)	Temperature rise 40°C (Max.)			
1	43.93	37.53				
2	42.77	36.89				
3	44.31	37.48	OK			
4	42.71	37.06				
5	43.37	37.18				
Average	43.42	37.23	ок			

Important Notice: This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell pic 2011.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE

PURPOSES ONLY.

**TOLERANCES:** 

 DRAWN BY:
 DATE:

 SHA
 20/04/11

 CHECKED BY:
 DATE:

 ASH
 20/04/11

 APPROVED BY:
 DATE:

 04/05/11

SIZE DWG NO. M10002637 ELECTRONIC FILE MCAP105422025A-400MU

U.O.M.: mm

**REV** 

Α

2 OF 3

SHEET:



PART NO.

### MCAP105422025A-400MU

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

### **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 control temperature and humidity in the storage area.			
Moisture sensitivity	DCR change	: No abnormality No damage : Within ±5% : Within ±5%	According to J-STD-0 Test condition Test duration Recovery	20B level 3 : 60°C 60% RH : 40 hrs : 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-0 Steam aging category Steam aging duration Solder Solder temperature Dip time	: 97°C 98% RH	

#### **Material List**

No.	ltem	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

bers of the Premier Farmell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from maging ence of the Companies of the Companies

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

TOLERANCES:

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

:	DRAWI	NG TITLE:					
	Inductor						
:	SIZE DWG NO.			ELECTRONIC FILE			REV
	Α		M10002637		MCAP105422025A-400MU		
:	SCAL	E: NTS	U.O.M.: mm		SHEET:	3 0	F 3