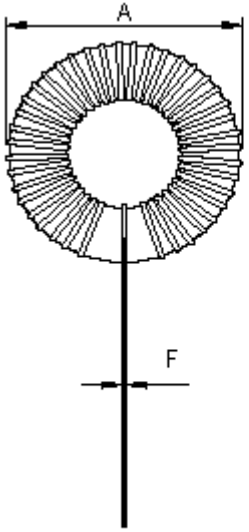
multicomp

PART NO.

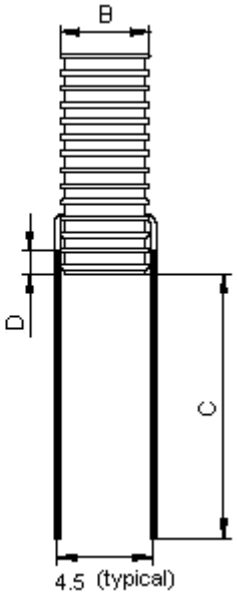
MCAP103722016A-8R2MU

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

Configurations and Dimensions



Front View

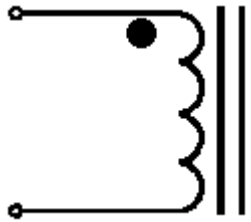


Side View

Dimensions : Millimetres

A	12 mm	(Max.)
B	5.5 mm	
C	15 ±2 mm	-
D	1 mm	(Min.)
F	Ø0.6 ±0.05 mm	-

Schematic Diagram



Note:

1. Wire UEFN/U (155°C) Ø0.6mm
2. 17TS (Reference) C.W

RoHS Compliant

Electrical Characteristics

Test Condition		
10 KHz / 5 mA	L	8.2 µH ±20%
T_a = 25°C	DCR	20 mΩ (Max.)
10 KHz / 5 mA I_{rms} = 2 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	F mm
Specification	**12 (Max.)**	**5.5 (Max.)**	**15 ±2**	**1 (Min.)**	**Ø0.6 ±0.5**
1	11.11	4.68	15.34	1.98	0.59
2	11.12	4.72	14.9	1.97	0.6
3	11.15	4.68	15.2	1.96	0.59
4	11.13	4.69	15.24	1.95	0.6
5	11.14	4.71	15.31	1.99	
Average	**11.13**	**4.7**	**15.2**	**1.97**	**0.6**

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
ASH	20/4/11
CHECKED BY:	DATE:
SAN	20/4/11
APPROVED BY:	DATE:
	04/5/11

DRAWING TITLE: **Inductor**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002631	MCAP103722016A-8R2MU	A

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

multicomp	PART NO. MCAP103722016A-8R2MU	REVISIONS								
		ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
		-	A	RELEASED	ASH	20/4/11	SAN	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} = 2 A**
Specification	**8.2 ±20%**	**20 (Max.)**	**Temperature rise 40°C (Max.)**
1	8.16	15.09	OK
2	8.26	15.11	
3	8.38	15.09	
4	8.58	14.96	
5	8.42	15.56	
Average	**8.36**	**15.16**	**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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Material List

No.	Item	Material Description
1	Core	T37-75-TAF200 (Red / White)
2	Wire	Ø0.6 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 8.2µH, 20%, 2 Pins	MCAP103722016A-8R2MU

http://www.element14.com

http://www.farnell.com

http://www.newark.com

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DRAWING TITLE: **Inductor**

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A	M10002631	MCAP103722016A-8R2MU	A

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