

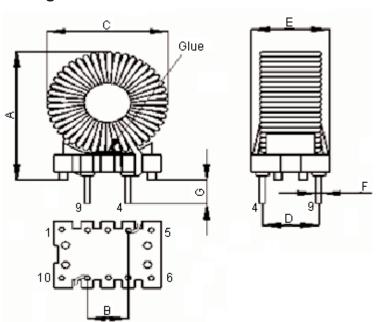
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# MCAPB109020067A-301MU

	REVISIONS							
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	А	RELEASED	Veena	07/2/11	Jagan	07/2/11	Farnell	21/2/11

RoHS

# **Configurations and Dimensions**



А	35.0 mm	(Maximum)
В	10.0 ±0.3 mm	-
С	28.0 mm	(Maximum)
D	12.0 ±0.3 mm	-
Е	17.0 ±0.5 mm	-
F	Ø1.0 mm	(Typical)
G	2.5 ±0.5 mm	-

Note : Pull out of the PIN 1, 2, 3, 5, 6, 7, 8, 10

### **Electrical Characteristics**

Test Condition		
10KHz/0.25V	L	300.0μH ±20%
T <sub>a</sub> = 25°C	DCR	170.0mΩ (Maximum)
10KHz/0.25V I <sub>rms</sub> = 6.0A	ΔΤ	Temperature Rise 40°C (Maximum)

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

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Farnell	21/02/11

DRAWING TITLE:									
Inductor Toroidal									
SIZE <b>A</b>	DWG NO.	M10002592		TRONIC FILE 09020067A-301MU	REV A				
SCALE: NTS		U.O.M.: mm		SHEET: 1 OF	- 5				

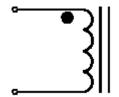


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# **Schematic Diagram**



#### Note:

- (1) Wire UEFN/U (155°C) Ø0.80mm.
- (2) 67TS (Reference) C.W

#### **Test Data for Mechanical**

Test Item	A mm	B mm	C mm	D mm	E mm	F mm	G
Specification	35.0 (Maximum)	10.0 ±0.3	28.0 (Maximum)	12.0 ±0.3	17.0 ±0.5	Ø1.0 (Typical)	2.5 ±0.5
1	30.69	10.05	25.81	12.05	17.03	1.02	2.41
2	31.01	10.07	25.78	12.02	17.11	1.08	2.32
3	31.22	9.98	25.95	12.04	17.10	0.97	2.86
4	31.47	10.02	25.88	11.94	17.07	1.04	2.65
5	30.67	10.04	25.92	12.01	17.05	1.07	2.51
Average	31.01	10.03	25.87	12.01	17.07	1.04	2.55

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:	DRAWING TITLE:								
	Inductor Toroidal								
:	SIZE	DWG NO.	1440000500	ELECTRONIC FILE R					
	Α		M10002592	APB10	09020067A-301MU	Α			
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PART NO.

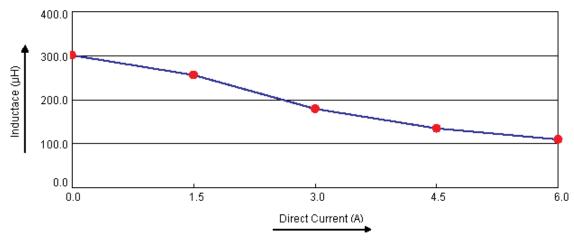
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### **Test Data for Electrical**

Test Item	L μH	DCR mΩ	ΔΤ	
Condition	10KHz/0.2 5V	T <sub>a</sub> = 25°C	10KHz/0.25V I <sub>rms</sub> = 6.0A	
Specification	300.0 ±20%	170.0 (Maximum)	Temperature Rise 40°C (Maximum)	
1	306.71	75.46		
2	300.66	75.26		
3	299.70	75.05	ОК	
4	297.05	76.41		
5	296.57	75.61	1	
Average	300.14	75.56	ОК	

# **Electric Characteristics**



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	Inductor Toroidal								
SIZE DWG NO. M10002592 ELECTRONIC FILE APB109020067A-301MU					REV A				
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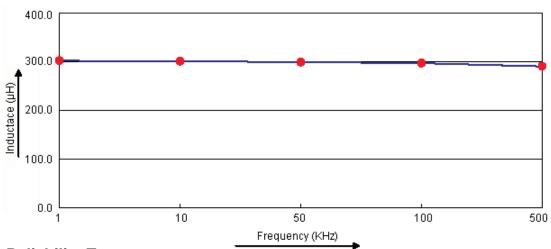


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# **Electric Characteristics**



# **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	According to J-STD-020B level 3 Test condition :60°C 60% RH Test duration :40 hours
Molecules series avity	DCR change : Within ±5% Inductance change : Within ±5%	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 hours  Solder : Lead-free solder  Solder temperature : 260°C ±5°C  Dip time : 5 +0/-0.5 seconds.

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	Inductor Toroidal							
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# **Material List**

No.	ltem	Material Description
1	Core	T90-75-TAF200 (Red/White)
2	Wire	Ø0.80mm UEFN/U (155°C)
3	Solder (Lead Free)	Sn99.3%/Cu0.7%
4	Base	BS1009
5	Glue	TH100A/TH100B

# **Part Number Table**

Description	Part Number	
Inductor, Toroidal, 300UH, 20%	MCAPB109020067A-301MU	

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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DRAWING TITLE:									
]			Inductor Toroidal						
size <b>A</b>	DWG NO.		M10002592	l .	TRONIC FII 09020067A-		ЛU	REV A	
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