

**Bottom View** 

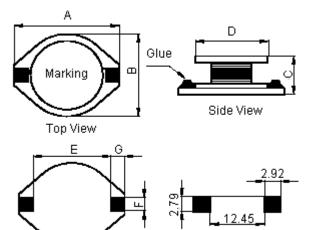
Marking:

PART NO.

## MCBF7344A-472KU

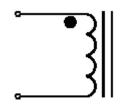
	REVISIONS							
ECN#	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	А	RELEASED	Sidhu	14/2/11	Jagan	14/2/11	Farnell	28/2/11

# **Configurations and Dimensions**



Α	18.54 mm	Maximum
В	15.24 mm	Maximum
С	12 mm	Maximum
D	12.7 ±0.3 mm	-
E	12.92 mm	Reference
F	2.54 mm	Reference
G	2.54 mm	Reference

# **Schematic Diagram**





### Note:

- (1) Wire Ø0.22mm x 1P 2UEWF 155°C
- (2) 302.5TS (Reference)

# Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm	G mm
Specification	18.54 (Maximum)	15.24 (Maximum)	12 (Maximum)	12.7 ±0.3	12.7 ±0.3   12.92   2.5 (Reference) (Refer		2.54 (Reference)
1	18.11	13.91	10.98	12.76	12.99	2.59	2.54
2	18.13	13.95	11.01	12.78	13	2.46	2.53
3	18.12	14.01	10.99	12.73	12.98	2.51	2.48
4	18.09	13.98	10.98	12.78	12.93	2.61	2.53
5	18.08	13.96	11.01	12.74	12.95	2.46	2.6
Average	18.11	13.96	10.99	12.76	12.97	2.53	2.54

# Electrical Characteristics (at 25°C)

Test Condition		
100KHz 0.25V	L	4.7mH ±10%
at 25°C	DCR	4.8Ω (Maximum)
100KHz 0.25V I <sub>rms</sub> = 0.4A	ΔΤ	Temperature Rise 40°C (Maximum)

Suggest PCB Layout

YY: Year

WW:Week

Dimensions: Millimetres

Operating temperature: -40°C to +125°C

472

YYWW

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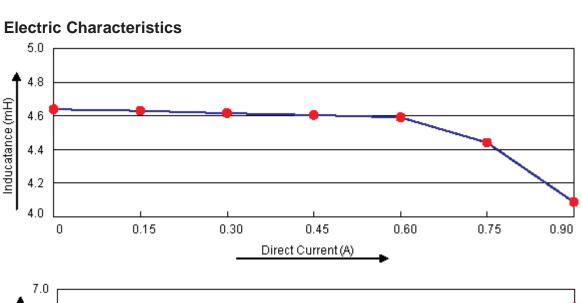
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		Inducto	or				
size A	DWG NO.	M10003227	· ·	TRONIC FIL <b>7344A-472</b>			REV A
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PART NO.

MCBF7344A-472KU

		REVISIONS		·		·		·
ECN#	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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# 7.0 6.4 5.8 5.2 4.6 4.0 1 10 50 100 150 200 150 300 Frequency (KHz)

## Test Data for Electrical

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Test Item	L mH	DCR Ω	ΔΤ
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I <sub>rms</sub> = 0.4A
Specification	4.7 ±10%	4.8 (Maximum)	Temperature Rise 40°C (Maximum)
1	4.66	4.12	ОК
2	4.62	4.07	ОК
3	4.64	4.09	ОК
4	4.63	4.06	ОК
5	4.6	4.11	ОК
Average	4.63	4.09	ок

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Farnell	28/02/11

Ξ:	DRAWI	DRAWING TITLE:								
1	Inductor									
<u>:</u> : 1	SIZE <b>Λ</b>	DWG NO.	M10003227	003227 ELECTRONIC FILE <b>BF7344A-472KU</b>				REV A		
Ξ:	$\overline{}$									
1	SCAL	E: NTS	U.O.M.: mm SHEET:			2	OF	3		



## MCBF7344A-472KU

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# **Reliability Test**

Test Items	Specifications	Test Method and Remarks			
Operating temperature range	-40°C to +125°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			
Moisture sensitivity	DCR change : Within ±20% Inductance change : Within ±20%	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 90% 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 ±5°C  Dip time : 5 +0/-0.5 seconds.			

## **Material List**

No.	Item	Material Description
1	Core	T2 DR12.7 x 10C B6.5 F7.0
2	Wire	Ø0.22mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%
4	Glue	TH320
5	Base	DAP HD127-3

## **Part Number Table**

Description	Part Number			
Inductor, SMD, 4.7MH, 10%	MCBF7344A-472KU			

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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DRAW	ING TITLE:						
Inductor							
SIZE	DWG NO.	M10003227		TRONIC FII <b>7344A-472</b>			REV A
SCAL	E: NTS	U.O.M.: mm		SHEET:	3	OF	<del></del> 3