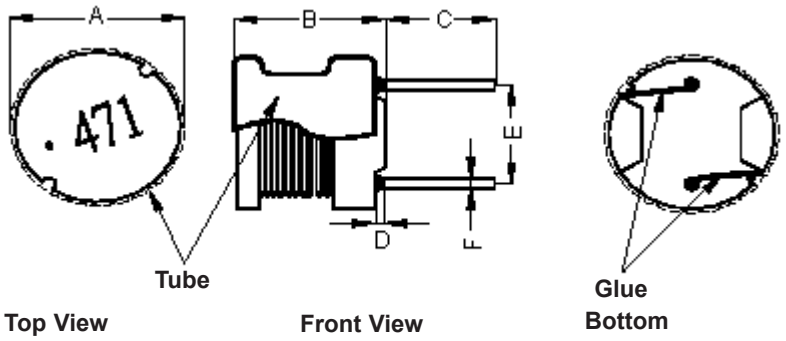
multicomp

PART NO.

MCSCH855U-471KU

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

Configurations and Dimensions



A	8 ±0.5 mm	-
B	5.5 ±0.5 mm	-
C	5 ±1 mm	-
D	1 mm	(Max.)
E	5 ±0.5 mm	-
F	Ø0.65 mm	(Ref.)

Note : White dot of marking indicates the start terminal of winding

Schematic Diagram

RoHS Compliant

Note:

1. Wire UEFN/U (155°C) Ø0.12mm
2. 93.5TS (Reference) C.W

Electrical Characteristics

Test Condition		
1 KHz 0.25 V	L	470 µH ±10%
T_a = 25°C	DCR	3 Ω (Max.)
1 KHz 0.25 V I_{rms} = 0.44 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	**8 ±0.5**	**5.5 ±0.5**	**5 ±1**	**1 (Max.)**	**5 ±0.5**	**Ø0.65 (Ref.)**
1	8.07	5.72	4.98	0.64	5.06	0.63
2	8.08	5.75	5.02	0.65		
3	8.06	5.72	5.07	0.68	5.05	0.62
4	8.05	5.73	4.9	0.7	5.08	
5		5.72	5.1	0.74	5.07	
Average	**8.06**	**5.73**	**5.01**	**0.68**	**5.06**	**0.62**

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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

DRAWING TITLE: **Inductor - Radial Leaded**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003232	MCSCH855U-471KU	A

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

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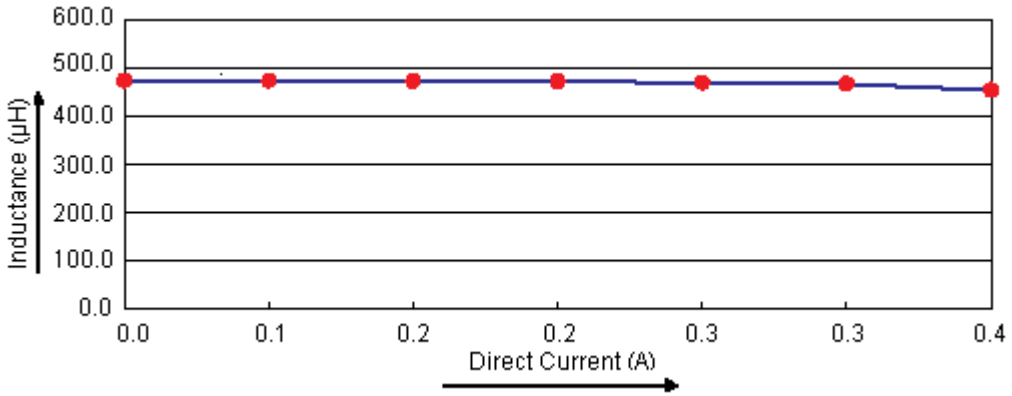
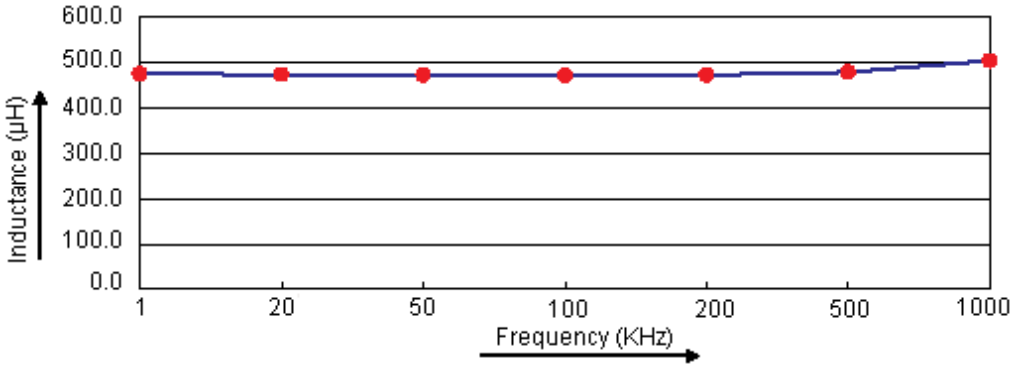
PART NO.

MCSCH855U-471KU

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

Electric Characteristics





Test Data for Electrical

Test Item	L µH	DCR Ω	ΔT
Condition	**1 KHz 0.25 V**	**at 25°C**	**1 KHz 0.25 V I_{rms} = 0.44 A**
Specification	**470 ±10%**	**3 (Max.)**	**Temperature rise 40°C (Max.)**
1	474.8	2.23	OK
2	476.55	2.22	
3	466.64	2.23	
4	472.75	2.22	
5	478.55	2.2	
Average	**473.86**	**2.22**	**OK**

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SID	20/04/11
CHECKED BY:	DATE:
SHA	20/04/11
APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE: **Inductor - Radial Leaded**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003232	MCSCH855U-471KU	A

SCALE: NTS | U.O.M.: mm | SHEET: 2 OF 3

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PART NO.

MCSCH855U-471KU

REVISIONS									
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SID	20/4/11	SHA	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 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

Material List

No.	Item	Material Description
1	Core	F4D DR2W7.8 × 5.5 (SW) RCH B3.5 F1.6 P5
2	Wire	Ø0.12 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%
4	Tube	CB-HFT
5	Glue	6020H-4

Part Number Table

Description	Part Number
Inductor, 470µH, 10%, Radial Leaded	MCSCH855U-471KU

http://www.element14.com

http://www.farnell.com

http://www.newark.com

TOLERANCES:

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

DRAWING TITLE: **Inductor - Radial Leaded**

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003232	MCSCH855U-471KU	A

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