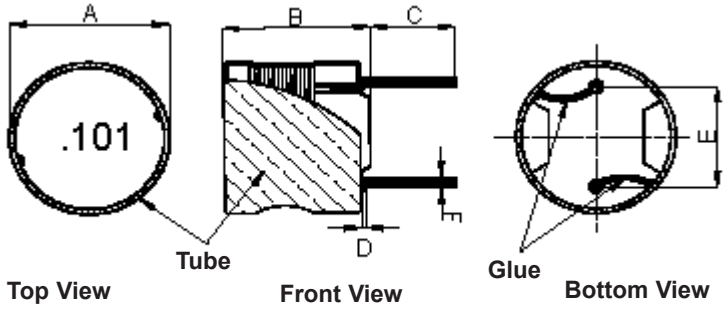
multicomp

PART NO.

MCSCH855U-101KU

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) Ø0.2mm
2. 44.5TS (Reference) C.W

Electrical Characteristics

Test Condition		
1 KHz 0.25 V	L	100 µH ±10%
T_a = 25°C	DCR	1 Ω (Max.)
1 KHz 0.25 V I_{rms} = 1.1 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	8.04	5.72	4.92	0.64	5.04	0.64
2	8.05	5.68	5.03	0.62	5.08	0.63
3	8.04	5.65	5.08	0.67		0.64
4	8.05	5.72	4.97	0.72	5.07	0.63
5		5.68	4.98	0.68	5.05	0.64
Average	**8.05**	**5.69**	**5**	**0.67**	**5.06**	**0.64**

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	M10003229	MCSCH855U-101KU	A

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

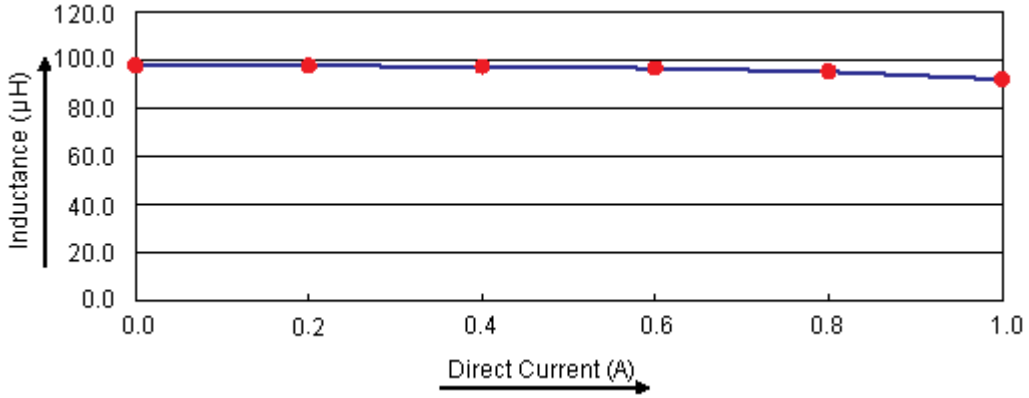
multicomp

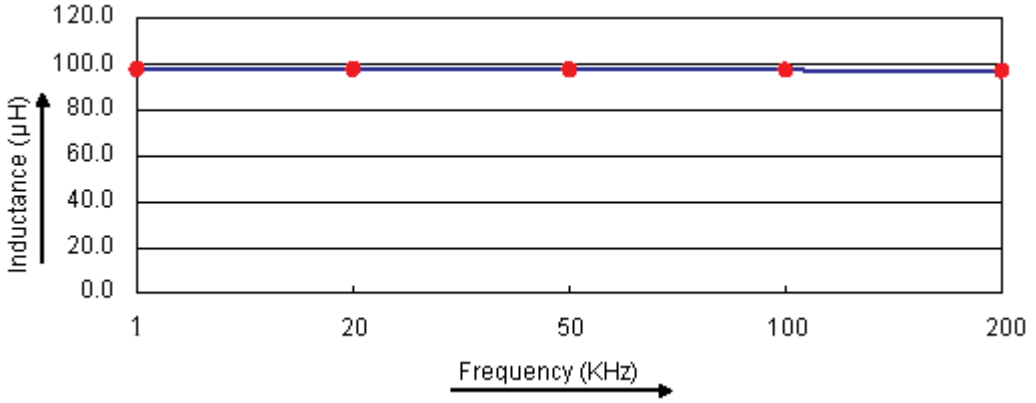
PART NO.

MCSCH855U-101KU

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} = 1.1 A**
Specification	**100 ±10%**	**1 (Max.)**	**Temperature rise 40°C (Max.)**
1	98.06	0.42	OK
2	96.5	0.43	
3	98.04	0.42	
4	96.66		
5	99.08		
Average	**97.67**	**0.42**	**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	M10003229	MCSCH855U-101KU	A

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

multicomp	PART NO. MCSCH855U-101KU	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
2	Wire	Ø0.2 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, 100µH, 10%, Radial Leaded	MCSCH855U-101KU

http://www.element14.com

http://www.farnell.com

http://www.newark.com

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	M10003229	MCSCH855U-101KU	A

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