



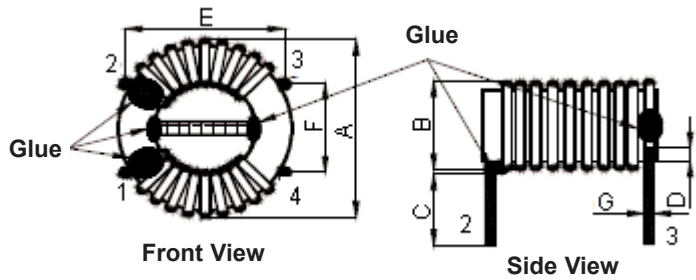
PART NO.

MCT25X12X15C-850PU

REVISIONS

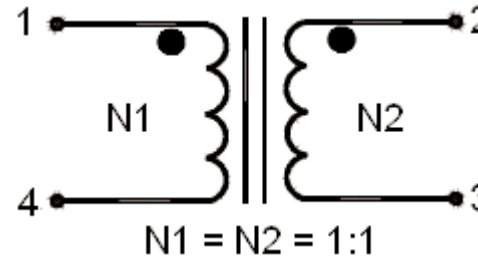
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SID	20/4/11	BHA	20/4/11		04/5/11

Configurations and Dimensions



A	31 mm	(Max.)
B	16 mm	
C	10 ±0.5 mm	-
D	0 to 5 mm	-
E	25.5 ±0.5 mm	-
F	14 ±0.5 mm	-
G	Ø1.06 mm	(Ref.)

Schematic Diagram



Note:

- Wire UEFN/U (155°C) Ø1.0mm
- N1 = N2 = 10TS (FIX) N1:C.W N2:C.CW

Electrical Characteristics

Test Condition		
1 KHz 10 mA (ALC on)	L (1-4)	85 µH ±25%
	L (2-3)	
T _a = 25°C	DCR (1-4)	13 mΩ (Max.)
	DCR(2-3)	
	IDC	12A (Max.)
HI-POT (Coil to Coil)		1,500 V ac 5 mA 2 s

Operating temperature : -25°C to +85°C

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm	G mm
Specification	31 (Max.)	16 (Max.)	10 ±0.5	0 to 5	25.5 ±0.5	14 ±0.5	Ø1.06 mm (Ref.)
1	28.99	14.96	10.17	2.23	25.57	14.2	0.99
2	28.62	15	10.23	2.54	25.46	14.17	
3	28.92	15.11	10.06	3.12	25.72	14.15	0.97
4	28.72	14.91	10.14	2.25	25.64	14.23	
5	29.07	14.97	10.15	2.13	25.4	14.06	0.98
Average	28.86	14.99	10.15	2.45	25.56	14.06	0.98

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DRAWING TITLE:

Common Mode Choke

SIZE A	DWG NO. M10003239	ELECTRONIC FILE MCT25X12X15C-850PU	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



PART NO.

MCT25X12X15C-850PU

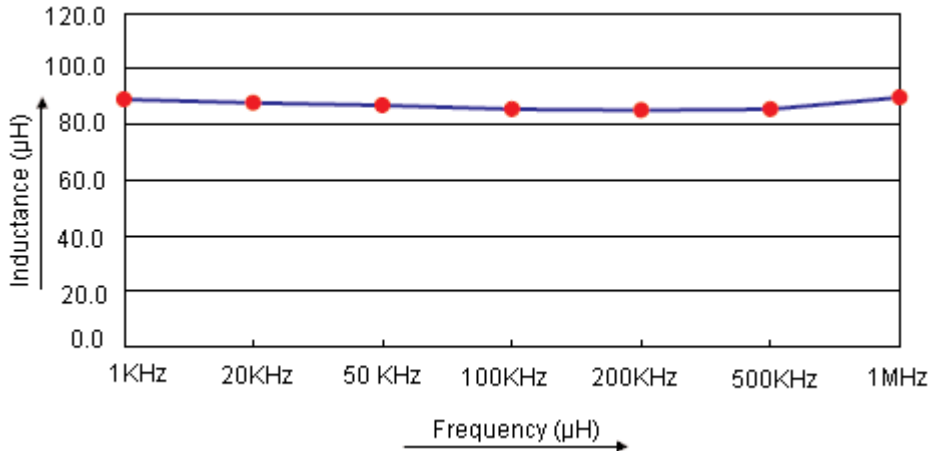
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Test Data for Electrical

Test Item	L (1-4) μH	L (2-3) μH	DCR (1-4) mΩ	DCR (2-3) mΩ	HI-POT (Coil to Coil)
Condition	1 KHz 10 mA (ALC on)	1 KHz 10 mA (ALC on)	T _a = 25°C	T _a = 25°C	1,500 V ac 5 mA 2 s
Specification	85 ±25%	85 ±25%	13 (Max.)	13 (Max.)	Pass
1	92.3	92.52	8.97	9.02	Pass
2	92.64	92.9	8.98	9.01	
3	91.72	91.4	9.11	8.99	
4	91.48	91.78	9.04	9.12	
5	92.56	92.7	9.01	8.99	
Average	92.14	92.26	9.02	9.03	Pass

Electric Characteristics



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DRAWING TITLE:

Common Mode Choke

SIZE
A

DWG NO.

M10003239

ELECTRONIC FILE
MCT25X12X15C-850PU

REV
A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCT25X12X15C-850PU

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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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	C5A T25 × 15 × 12C
2	Wire	Ø1.0 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%
4	Vernish	T-4260 (a) / TX-111
5	Space	FR4 (thickness 2.0 mm)
6	Glue	TH100A and TH100B

Part Number Table

Description	Part Number
Choke, Common Mode, 85µH, 12A	MCT25X12X15C-850PU

<http://www.element14.com>

<http://www.farnell.com>

<http://www.newark.com>

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Common Mode Choke

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DWG NO.

M10003239

ELECTRONIC FILE
MCT25X12X15C-850PU

REV
A

SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 3