



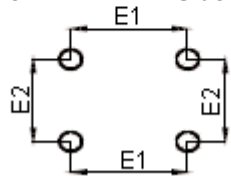
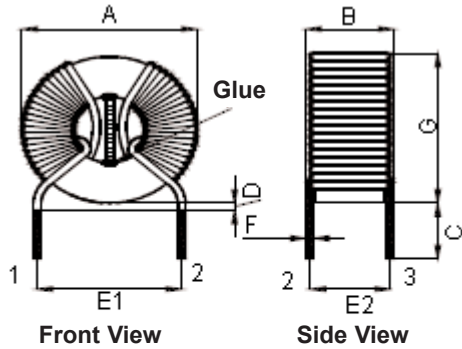
PART NO.

MCT25X15X15C-502NU

REVISIONS

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

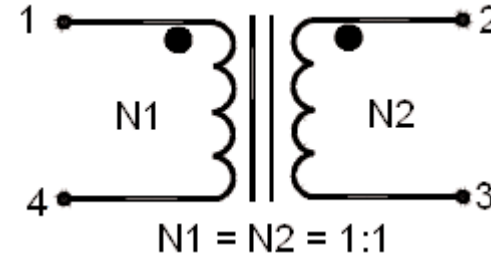
Configurations and Dimensions



Suggest PCB Layout

A	30 mm	(Max.)
B	21 mm	(Max.)
C	8 mm	(Ref.)
D	1 mm	(Max.)
E1	23 ±3 mm	-
E2	15 ±3 mm	-
F	Ø0.8 mm	(Typ.)
G	27.5 mm	(Max.)

Schematic Diagram



Note:

1. Wire UEFN/U (155°C) Ø0.8mm
2. N1 = N2 = 22TS (Reference) N1:C.W N2:C.CW



Electrical Characteristics

Test Condition		
10 KHz / 50 µA	L (1-4)	5 mH ±30%
	L (2-3)	
T <sub>a</sub> = 25°C	DCR (1-4)	45 mΩ (Max.)
	DCR (2-3)	
	IDC	6A
HI-Pot (Coil to Coil)		1,500 V ac 5 mA 1min

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

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E1 mm	E2 mm	F mm	G mm
Specification	30 (Max.)	21 (Max.)	8 (Ref.)	1 (Max.)	23 ±3	15 ±3	Ø0.8 (Typ.)	27.5 (Max.)
1	28.28	18.85	8.35	0.18	23.8	15.8	0.8	25.53
2	28.38	18.4	8.26	0.15	23.62	16.25	0.76	25.88
3	28.19	18.42	8.51	0.2	23.73	16.52	0.78	25.59
4	28.46	18.7	8.6	0.16	23.95	16.75	0.75	25.4
5	28.49		8.39	0.22	24.25	16.71	0.76	25.89
<b>Average</b>	<b>28.36</b>	<b>18.61</b>	<b>8.42</b>	<b>0.18</b>	<b>23.87</b>	<b>16.41</b>	<b>0.77</b>	<b>25.66</b>

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DATE:

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DATE:

20/4/11

DATE:

04/5/11

DRAWING TITLE:

**Common Mode Choke**

SIZE  
**A**

DWG NO.

**M10003238**

SCALE: NTS

U.O.M.: mm

ELECTRONIC FILE  
MCT25X15X15C-502NU

REV  
**A**

SHEET: 1 OF 3



PART NO.

MCT25X15X15C-502NU

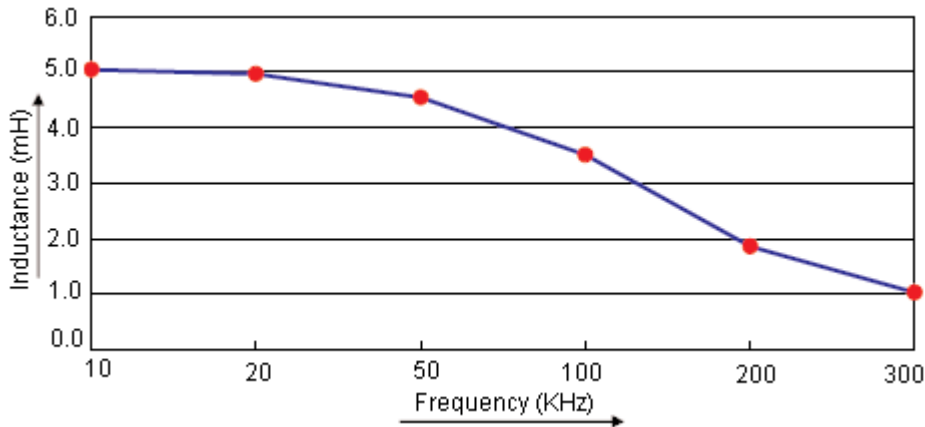
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Test Data for Electrical

Test Item	L (1-4) mH	L (2-3) mH	DCR (1-4) mΩ	DCR (2-3) mΩ	HI-Pot (Coil to Coil)
Condition	10 KHz / 50 μA	10 KHz / 50 μA	T <sub>a</sub> = 25°C	T <sub>a</sub> = 25°C	1,500 V ac 5 mA 1 (Min.)
Specification	5 ±30%	5 ±30%	45 (Max.)	45 (Max.)	Pass
1	4.88	4.86	35.36	35.42	Pass
2	4.9	4.9	35.39	35.4	
3	5.54	5.56	35.53	35.56	
4	5.72	5.74	36.56	36.55	
5	5.76	5.78	35.16	35.2	
Average	5.36	5.37	35.6	35.63	Pass

Electric Characteristics



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04/5/11

DRAWING TITLE:

Common Mode Choke

SIZE  
A

DWG NO.

M10003238

ELECTRONIC FILE  
MCT25X15X15C-502NU

REV  
A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCT25X15X15C-502NU

REVISIONS

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Reliability Test

Test Item	Specifications	Test Method and Remarks
Operating temperature range	-25°C to +85°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

Part Number Table

Description	Part Number
Choke, Common Mode, 1MH, 6A	MCT25X15X15C-502NU

<http://www.element14.com>

<http://www.farnell.com>

<http://www.newark.com>

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	04/5/11

<b>DRAWING TITLE:</b>			
<b>Common Mode Choke</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10003238	MCT25X15X15C-502NU	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 3 OF 3</b>