



Mag Layers USA, INC

Specification Sheet

P/N : **MCM-0905-102Y-E-RU**

Products:

[Molded Power Chokes](#)

[Multilayer Chip Inductors](#)

[Lan Transformer](#)

[RF Passive / Antennas](#)

[Automotive](#)

Certifications:

[ISO9001](#)

[IATF16949](#)

[ISO14001](#)

[QC080000](#)

US Office

5406 Bolsa Ave.,
Huntington Beach, CA 92649
(714) 898-8377

Contact Us

www.maglayersusa.com
info@maglayersusa.com

I . SCOPE :

This specification applies to the Pb Free high current type SMD Common mode filter
for MCM-0905-SERIES-□-□□

PRODUCT IDENTIFICATION

MCM - 0905 - 102 Y - E - □□-RU

① ② ③ ④ ⑤

- ① Product Code
- ② Dimensions Code
- ③ Inductance Code
- ④ Tolerance Code
- ⑤ Inner Control Code

II . INDEX :

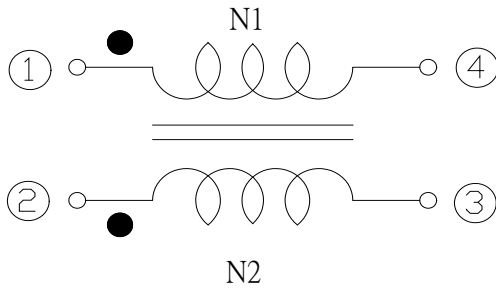
LISTED ITEM	ATTACHEMENT & TABLES	PAGE
1. SHAPES AND DIMENSIONS	Please see (1)	2/8
2. MATERIALS	Please see (3)	2/8
3. ELECTRICAL SPECIFICATIONS	Please see (2)	2/8 , 3/8
4. CHARACTERISTICS	Please see (3)	2/8 , 3/8
5. RELIABILITY TEST METHOD	Please see (4)	4/8 , 5/8
6. LAND DIMENSION (Ref.)	Please see (5)	6/8
7. TEST EQUIPMENT	Please see (6)	6/8
8. PACKAGING	Please see (7)	7/8 , 8/8
<p>Unless otherwise specified, test condition should be Temp. = 20±5℃, Humidity = 35~85%</p> <p>But if needed, then test condition should be Temp. = 20±2℃, Humidity = 65±5%</p> <p>9.SHELF LIFE</p> <p>Storage Condition: The temperature should be within -40℃ ~105℃ and humidity should be less than 75%RH. The product should be used within 12 months from the time of delivery.</p> <p>In addition, suggest to use product within 6 months from the time of delivery.</p>		

TABLE 1

MAGLAYERS PT/NO.	Inductance L(uH) (1-4),(2-3) at 100KHz/0.1V	Resistance RDC(Ω) Max. (1-4),(2-3)	Rated Current (A) Max.	Insulation Resistance (M Ω) Min.
MCM-0905-102Y-E-□□-RU	1000 +50%/-30%	0.3	0.7	100

Rated Current : Based on temperature rise (ΔT : 40°C Typ.)

CIRCUIT DIAGRAM

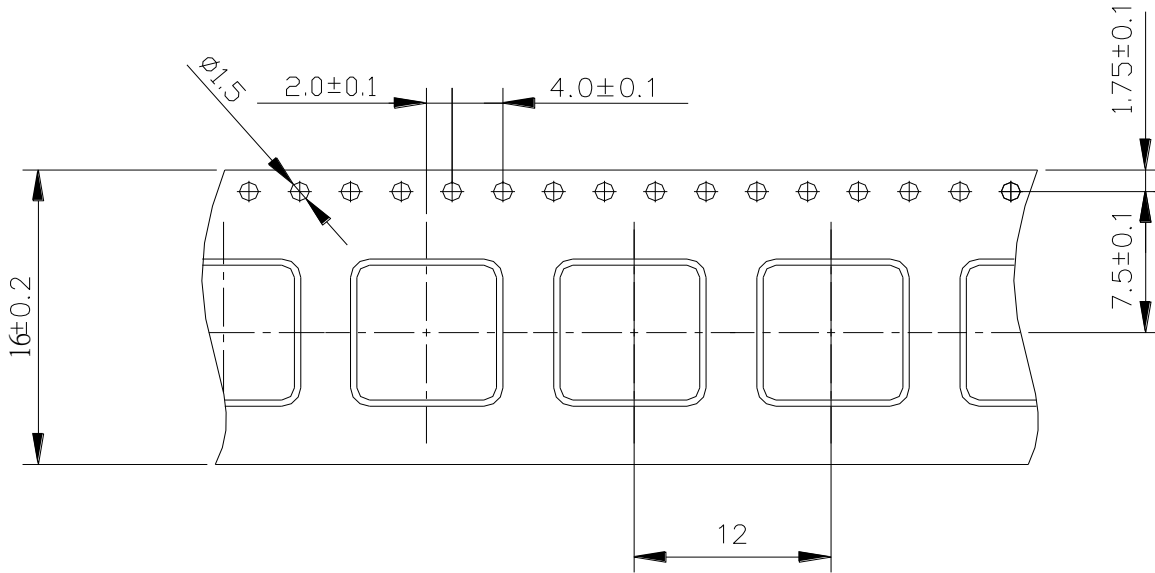


**(4) RELIABILITY TEST METHOD
MECHANICAL**

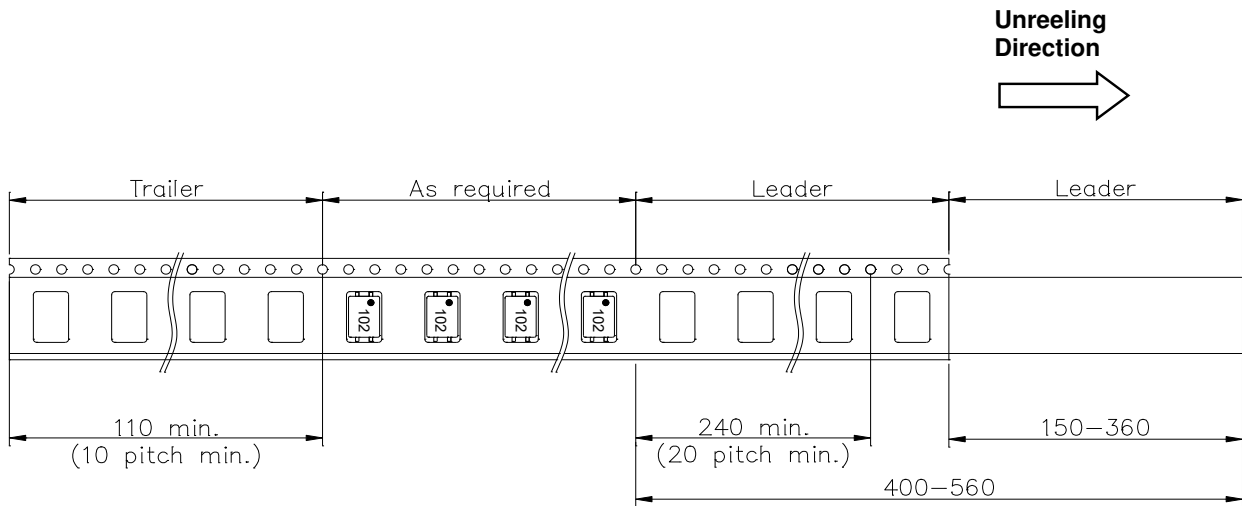
TEST ITEM	SPECIFICATION	TEST DETAILS
Solder ability	The product shall be connected to the test circuit board by the fillet (the height is 0.2mm).	Apply cream solder to the printed circuit board . Refer to clause 8 for Reflow profile.
Resistance to Soldering heat (reflow soldering)	There shall be no damage or problems.	<p>Temperature profile of reflow soldering</p> <p>The specimen shall be passed through the reflow oven with the condition shown in the above profile for 1 time. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.</p>
Terminal strength	The terminal electrode and the ferrite must not be damaged.	<p>Solder a chip to test substrate , and then laterally apply a load 9.8N in the arrow direction.</p>
Strength on PC board bending	The terminal electrode and the ferrite must not be damaged.	<p>Solder a chip to test substrate and then apply a load.</p> <p>Test board:FR4 100×40×1mm Fall speed:1mm/sec. Dimensions in mm</p>
High temperature resistance	<p>Impedance:Within±20% of the initial value.</p> <p>Insulation resistance and DC resistance on the specification(refer to clause 2-1) shall be met.</p> <p>The terminal electrode and the ferrite must not be damaged.</p>	<p>After the samples shall be soldered onto the test circuit board,the test shall be done.</p> <p>Measurement : After placing for 24 hours min.</p> <p>Temperature : +85±2°C</p> <p>Applied voltage : Rated voltage</p> <p>Applied current : Rated current</p> <p>Testing time : 500±12 hours</p>

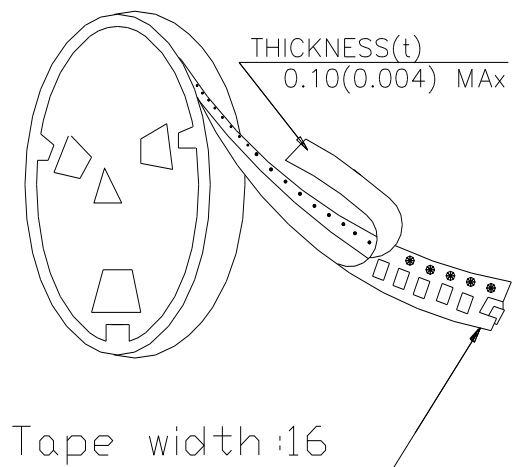
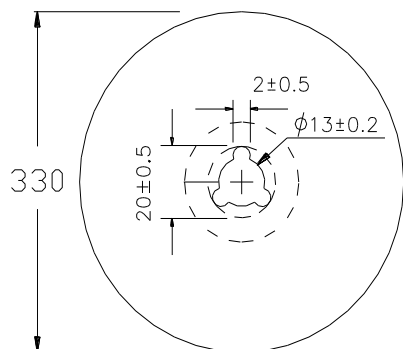
(6) PACKAGING

(6)-1 CARRIER TAPE DIMENSIONS (mm)



(6)-2 TAPING DIMENSIONS (mm)





1000 pcs/Reel

The products are packaged so that no damage will be sustained.



MAG.LAYERS

TYPICAL ELECTRICAL CHARACTERISTICS

