

Specification for Approval

Date: 2024/1/1

Customer: _____

BYTEK P/N: BAM1012BF-Series

CUSTOMER P/N: _____

DESCRIPTION: _____

QUANTITY: _____ pcs

| | | |
|----------------------------|--|--|
| REMARK: | | |
| Customer Approval Feedback | | |
| | | |

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Sales Dep.

| APPROVED | CHECKED |
|----------|---------|
| 谢林阳 | 李昱珩 |

R&D Center

| APPROVED | CHECKED | DRAWN |
|----------|---------|-------|
| 文睿 | 谢庆芬 | 兰静 |

This product belongs to the industrial grade standard, not the vehicle gauge product! Can not use auto parts, if the customer is not expressly informed and privately used to auto parts, produce any consequences, the original is not responsible for after-sales service, thank you!

Features and Application

- Powerful components with composite co-fired material to solve EMI problem for high speed differential signal transmission line as USB, and LVDS, without distortion to high speed signal transmission.
- MIPI, MHL serial interface in mobile device.

1.PART NUMBER CODE

BAM
1012
BF
-
900
T
03
-
01

1
2
3
4
5
6
7

1. Series Name
2. Dimensions L*W
3. Material Code
4. Impedance at 100MHz (ex : 900=90Ω)
5. Packaging
6. Rated Current (ex : 03=300mA)
7. Code

2.PRODUCT DETAILS

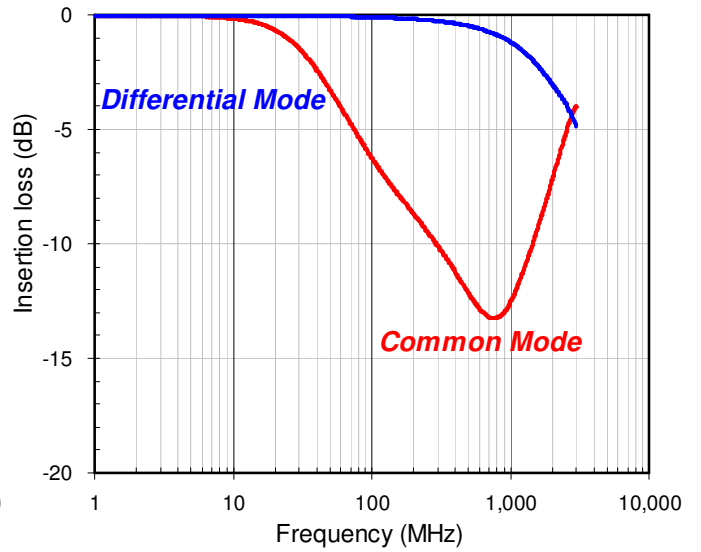
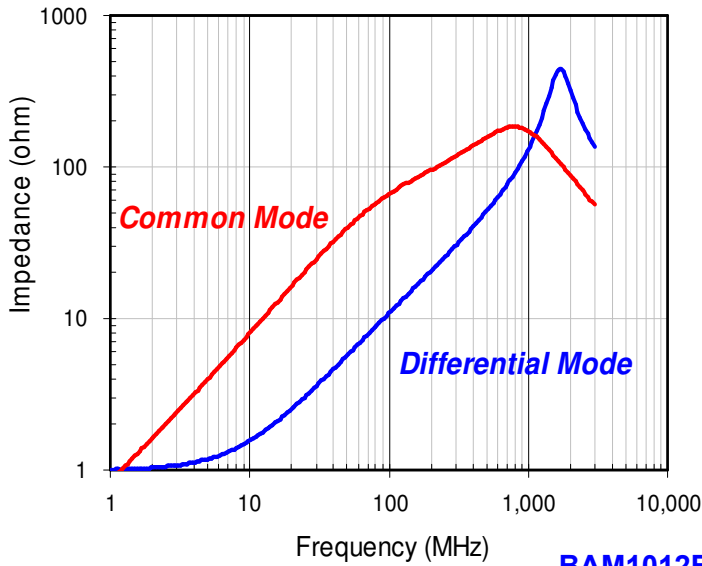
| Part No. | Imp. Com. (Ω)±25% @100MHz | DCR Max. (Ω) | Rated Current Max.(mA) | Rated Voltage (V) | Withstand Voltage (V) | Insulation Resistance Min.(MΩ) |
|---------------------|---|-----------------|------------------------------|-------------------------|-----------------------------|--------------------------------------|
| BAM1012BF-670T03-01 | 67 | 0.50 | 300 | 10 | 25 | 200 |
| BAM1012BF-900T03-01 | 90 | 0.60 | 300 | 10 | 25 | 200 |
| BAM1012BF-121T03-01 | 120 | 0.60 | 300 | 10 | 25 | 200 |
| Test Instruments | •Agilent E4991A RF IMPEDANCE / MATERIAL ANALYZER •HP4338 MILLIOHMMETER •Agilent E5071C ENA SERIES NETWORK ANALYZER •Keithley 2410 1100V SOURCE METER | | | | | |

3.TYPICAL CHARACTERISTIC

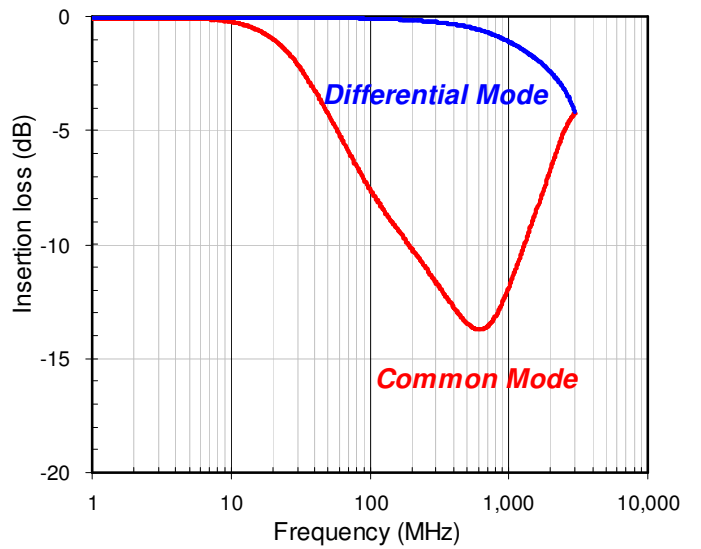
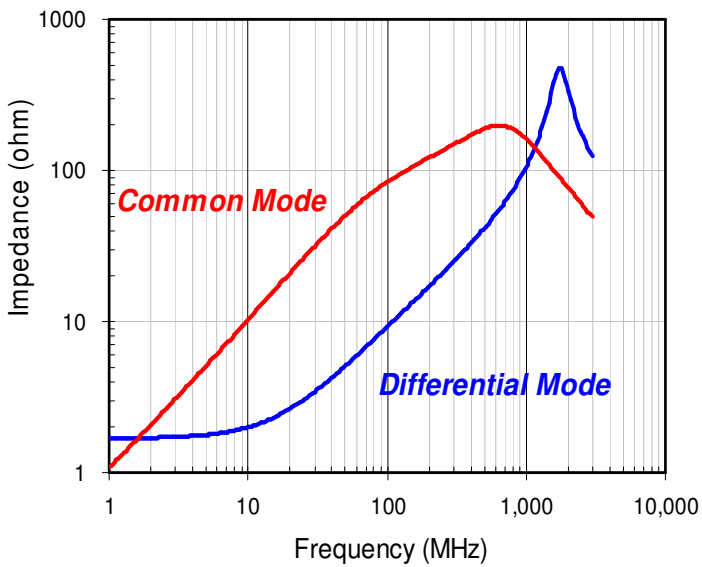
IMPEDANCE vs. FREQUENCY CHARACTERISTICS

INSERTION LOSS vs. FREQUENCY CHARACTERISTICS

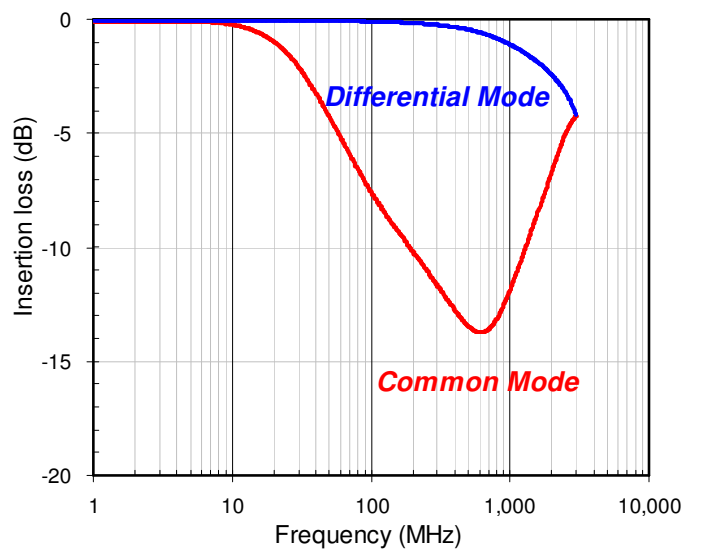
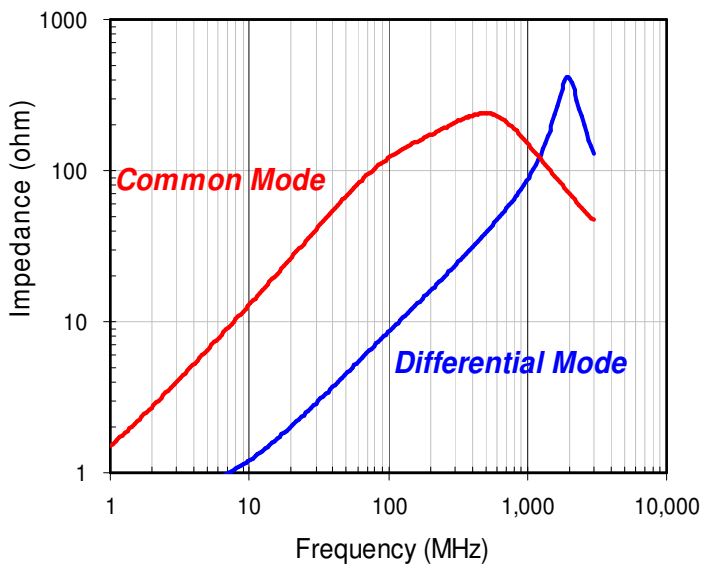
BAM1012BF-670T03-01



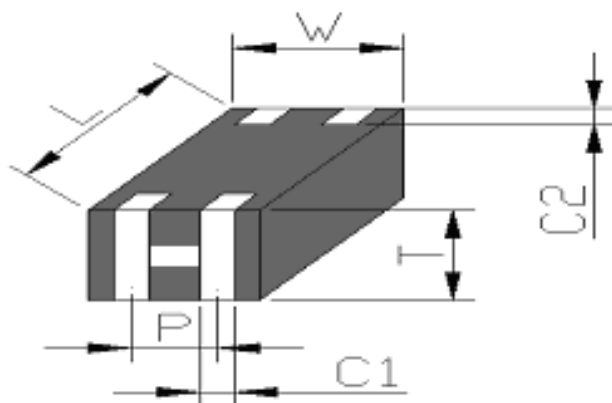
BAM1012BF-900T03-01



BAM1012BF-121T03-01



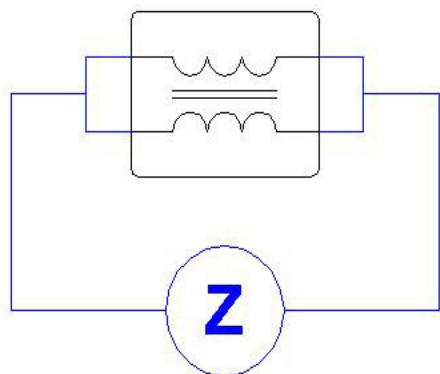
4.SHAPES AND DIMENSIONS



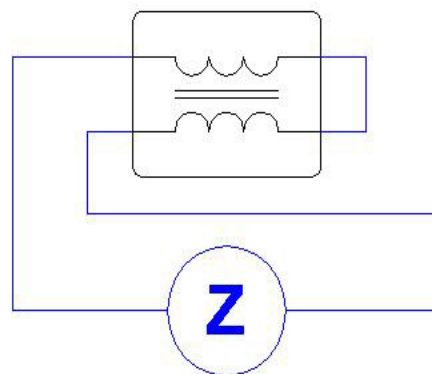
| TYPE | 1012 |
|----------|-----------|
| L | 1.25±0.10 |
| W | 1.00±0.10 |
| T | 0.60±0.10 |
| P | 0.50±0.10 |
| C1 | 0.30±0.10 |
| C2 | 0.20±0.15 |
| Unit: mm | |

5.MEASURING CIRCUITS

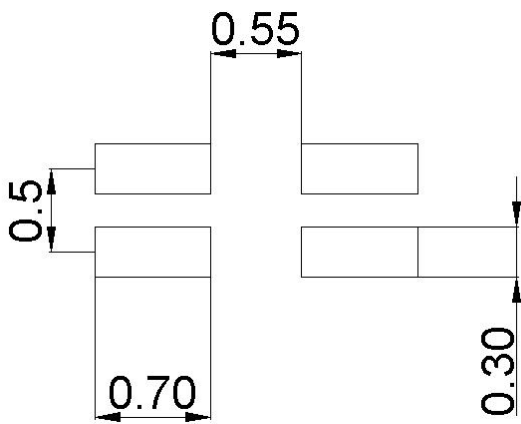
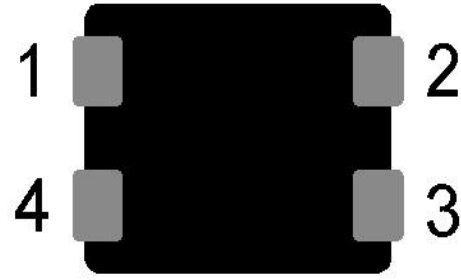
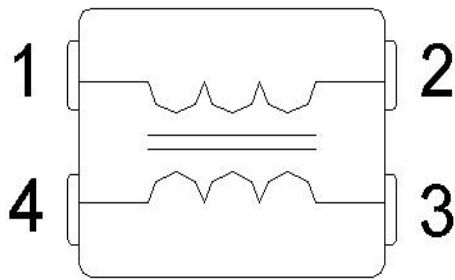
(A):Common mode



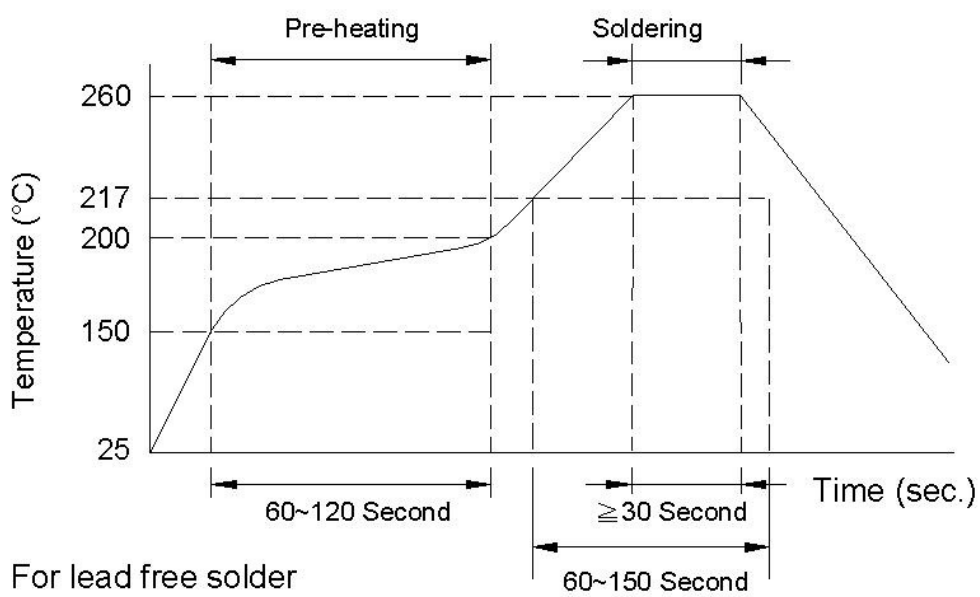
(B):Differential mode



6.CIRCUIT CONFIGURATION & LAYOUT PAD



7.RECOMMENDED SOLDERING CONDITIONS

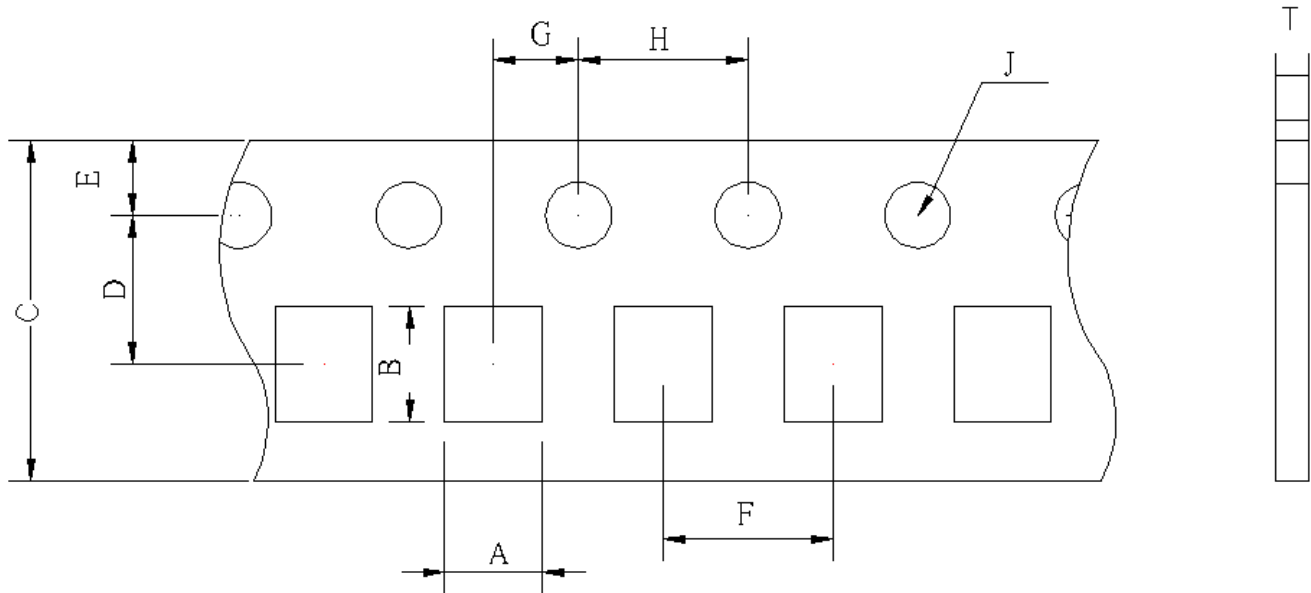


8.RELIABILITY AND TEST CONDITION

| Test item | Test condition | Criteria |
|----------------------------------|--|---|
| Temperature Cycle | A. Temperature : -40 ~ +85°C B. Cycle : 100 cycles C. Dwell time : 30minutes Measurement : at ambient temperature 24 hrs after test completion | A. No mechanical damage B. Impedance value should be within ± 20 % of the initial value |
| Operational Life | A. Temperature : 85°C ± 5°C B. Test time : 1000 hrs C. Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion | A. No mechanical damage B. Impedance value should be within ± 20 % of the initial value |
| Biased Humidity | A. Temperature : 40 ± 2°C B. Humidity : 90 ~ 95 % RH C. Test time : 1000 hrs D. Apply current : full rated current Measurement : at ambient temperature 24 hrs after test completion | A. No mechanical damage B. Impedance value should be within ± 20 % of the initial value |
| Resistance to Solder Heat | A. Solder temperature : 260 ± 5°C B. Flux : Rosin C. DIP time : 10 ± 1 sec | A. More than 95 % of terminal electrode should be covered with new solder B. No mechanical damage C. Impedance value should be within ± 20 % of the initial value |
| Steam Aging Test | A. Temperature : 93 ± 2°C B. Test time : 4 hrs(MCA) Others : 8 hrs C. Solder temperature : 235 ± 5°C D. Flux : Rosin E. DIP time : 5 ± 1 sec | More than 95 % of terminal electrode should be covered with new solder |

9.TAPE AND REEL SPECIFICATIONS

Type : Paper Carrier

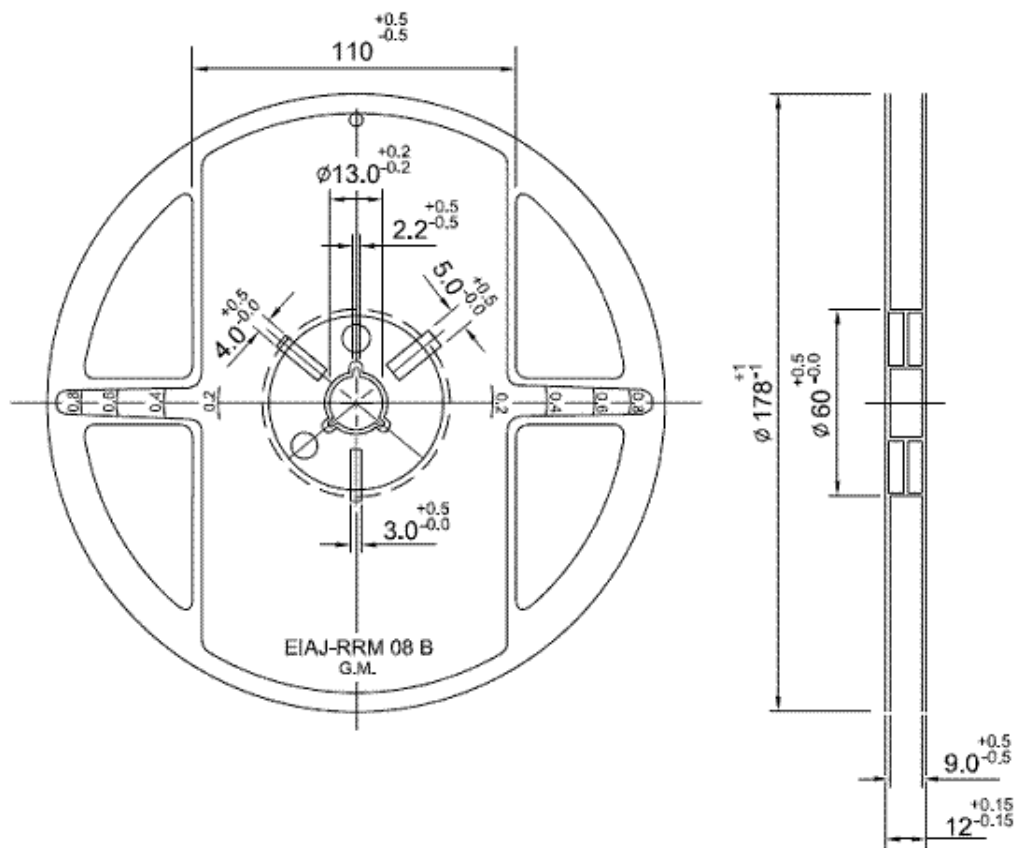


Unit : mm

| Symbol | Size | Symbol | Size |
|--------|-----------|--------|------------|
| C | 8.00±0.10 | H | 4.00±0.10 |
| D | 3.50±0.05 | J | Φ1.55±0.05 |
| E | 1.75±0.05 | T | 0.75±0.03 |
| F | 4.00±0.10 | A | 1.20±0.05 |
| G | 2.00±0.05 | B | 1.45±0.05 |

10. REEL DIMENSIONS

Unit: mm



11. STANDARD QUANTITY FOR PACKAGING

- Packaging style : Taping
- Reel packaging quantity : 4000 pcs/
- reel Inner box : 5 reel/inner box

12. GENERAL TECHNICAL DATA

- Operating temperature range : - 40°C ~ +85°C
- Storage temperature : 40°C Max., 70%RH
- Max. Storage Time: 6 months Max.
- Soldering method: Reflow