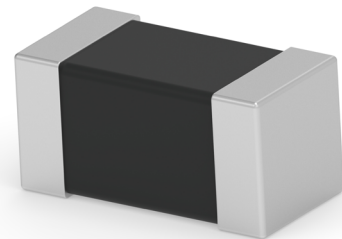


# AUTOMOTIVE GRADE MULTILAYER CHIP BEADS

## TYPE BMC-Q SERIES

### INTRODUCTION

TE Connectivity (TE) introduces its automotive grade multilayer chip bead inductors. The BMC-Q series are designed with a monolithic inorganic material construction. The inductors are designed for high and ultra-high current capability and are AEC-Q200 compliant. The inductors are available in 0402, 0603, 0805 and 1204 packaging sizes.



### FEATURES

- Effective EMI protection
- Low DC resistance
- Multiple size availability
- AEC-Q200 qualified
- Moisture sensitivity level – MSL2

### APPLICATIONS

- Automotive multi-media system
- Wireless connection system
- Body comfort system
- Automotive low power systems

**Note:** Not recommended for automotive power systems and/or safety management systems without special clarifications. Please consult with TE for feasibility evaluation based on your design requirements.

## Electrical Characteristics

### BMC-Q 0402: High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q1E0000H  | ZR            | 0-15 Ω    | 100 MHz, 50 mV | 0.04         | 800                     |
| BMC-Q1E0005H  | 5R0           |           |                |              |                         |
| BMC-Q1E0007H  | 7R0           |           |                |              |                         |
| BMC-Q1E0009H  | 9R0           | 0-11 Ω    |                |              |                         |
| BMC-Q1E0011H  | 11R           | 5-13 Ω    |                |              |                         |
| BMC-Q1E0015H  | 15R           | 7-15 Ω    |                |              |                         |
| BMC-Q1E0019H  | 19R           | 9-21 Ω    |                |              |                         |
| BMC-Q1E0019H  | 19R           | 12-25 Ω   |                | 0.06         | 700                     |
| BMC-Q1EY0026H | 26R           | ±25%      |                | 0.08         |                         |
| BMC-Q1EY0031H | 31R           |           |                | 0.15         | 600                     |
| BMC-Q1EY0036H | 36R           |           |                |              |                         |
| BMC-Q1EY0050H | 50R           |           |                |              |                         |
| BMC-Q1EY0060H | 60R           |           |                | 0.2          | 450                     |
| BMC-Q1EY0070H | 70R           |           |                |              |                         |

## Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

### BMC-Q 0402: High Current

| Part No.      | Impedance ( $\Omega$ ) | Tolerance  | Test Condition | DCR ( $\Omega$ ) max. | Rated Current (mA) max. |
|---------------|------------------------|------------|----------------|-----------------------|-------------------------|
| BMC-Q1EY0075H | 75R                    | $\pm 25\%$ | 100 MHz, 50 mV | 0.2                   | 450                     |
| BMC-Q1EY0080H | 80R                    |            |                |                       |                         |
| BMC-Q1EY0100H | 100R                   |            |                |                       |                         |
| BMC-Q1EY0120H | 120R                   |            |                | 0.25                  |                         |
| BMC-Q1EY0150H | 150R                   |            |                |                       | 300                     |
| BMC-Q1EY0180H | 180R                   |            |                | 0.4                   |                         |
| BMC-Q1EY0220H | 220R                   |            |                | 0.5                   |                         |
| BMC-Q1EY0300H | 300R                   |            |                | 0.65                  |                         |
| BMC-Q1EY0500H | 500R                   |            |                | 0.7                   | 200                     |
| BMC-Q1EY0600H | 600R                   |            |                | 0.9                   |                         |
| BMC-Q1EY0800H | 800R                   |            |                | 1                     |                         |
| BMC-Q1EY1000H | 1K0                    |            |                |                       |                         |

### BMC-Q 0603: High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |        |
|---------------|---------------|-----------|----------------|--------------|-------------------------|--------|
| BMC-Q1J0000H  | ZR            | 0~15 Ω    | 100 MHz, 50 mV | 0.080        | 1000                    |        |
| BMC-Q1J0005H  | 5R0           |           |                |              |                         |        |
| BMC-Q1J0007H  | 7R0           |           |                |              |                         | 0~11 Ω |
| BMC-Q1J0009H  | 9R0           | 5~13 Ω    |                |              |                         |        |
| BMC-Q1J0011H  | 11R           | 7~15 Ω    |                |              |                         |        |
| BMC-Q1J0015H  | 15R           | 9~21 Ω    |                |              |                         |        |
| BMC-Q1J0019H  | 19R           | 12~25 Ω   |                |              |                         |        |
| BMC-Q1JY0026H | 26R           | ±25%      |                | 0.120        |                         | 1000   |
| BMC-Q1JY0030H | 30R           |           |                |              |                         |        |
| BMC-Q1JY0031H | 31R           |           |                |              |                         |        |
| BMC-Q1JY0050H | 50R           |           |                |              |                         |        |
| BMC-Q1JY0060H | 60R           |           |                |              |                         |        |
| BMC-Q1JY0070H | 70R           |           |                |              |                         |        |
| BMC-Q1JY0080H | 80R           |           |                |              |                         |        |
| BMC-Q1JY0100H | 100R          |           |                | 0.150        |                         |        |
| BMC-Q1JY0120H | 120R          |           |                |              |                         |        |
| BMC-Q1JY0150H | 150R          |           |                |              |                         |        |
| BMC-Q1JY0180H | 180R          |           |                | 0.200        |                         |        |
| BMC-Q1JY0220H | 220R          |           |                |              |                         |        |
| BMC-Q1JY0300H | 300R          |           |                | 0.250        |                         |        |
| BMC-Q1JY0500H | 500R          |           |                | 0.300        |                         |        |
| BMC-Q1JY0600H | 600R          |           |                |              |                         |        |
| BMC-Q1JY0800H | 800R          |           |                | 0.550        | 500                     |        |
| BMC-Q1JY1000H | 1K0           |           |                |              |                         |        |

# Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

## BMC-Q 0805: High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q2A0000H  | ZR            | 0~15 Ω    | 100 MHz, 50 mV | 0.030        | 3000                    |
| BMC-Q2A0005H  | 5R0           |           |                |              |                         |
| BMC-Q2A0007H  | 7R0           | 0~11 Ω    |                |              |                         |
| BMC-Q2A0009H  | 9R0           | 5~13 Ω    |                |              |                         |
| BMC-Q2A0011H  | 11R           | 7~15 Ω    |                |              |                         |
| BMC-Q2A0015H  | 15R           | 9~21 Ω    |                |              |                         |
| BMC-Q2A0019H  | 19R           | 12~25 Ω   |                |              |                         |
| BMC-Q2AY0030H | 30R           | ±25%      |                | 0.050        | 2500                    |
| BMC-Q2AY0031H | 31R           |           |                |              |                         |
| BMC-Q2AY0036H | 36R           |           |                |              |                         |
| BMC-Q2AY0060H | 60R           |           |                |              |                         |
| BMC-Q2AY0070H | 70R           |           |                | 0.080        | 2500                    |
| BMC-Q2AY0080H | 80R           |           |                |              |                         |
| BMC-Q2AY0100H | 100R          |           |                | 0.100        | 2000                    |
| BMC-Q2AY0120H | 120R          |           |                |              |                         |
| BMC-Q2AY0150H | 150R          |           |                |              |                         |
| BMC-Q2AY0180H | 180R          |           |                |              |                         |
| BMC-Q2AY0200H | 200R          |           |                | 0.150        |                         |
| BMC-Q2AY0220H | 220R          |           |                |              |                         |
| BMC-Q2AY0300H | 300R          |           |                | 0.200        |                         |
| BMC-Q2AY0500H | 500R          |           |                | 0.250        | 1500                    |
| BMC-Q2AY0600H | 600R          |           |                | 0.300        | 800                     |
| BMC-Q2AY0800H | 800R          |           |                |              |                         |
| BMC-Q2AY1000H | 1K0           |           |                | 0.450        | 500                     |
| BMC-Q2AY1200H | 1.2K0         |           |                |              |                         |
| BMC-Q2AY1500H | 1.5K0         |           |                | 0.500        | 300                     |

## BMC-Q 1204: High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q2C0000H  | ZR            | 0-15 Ω    | 100 MHz, 50 mV | 0.040        | 4000                    |
| BMC-Q2C0005H  | 5R0           | 0-15 Ω    |                |              |                         |
| BMC-Q2C0007H  | 7R0           | 0-11 Ω    |                |              |                         |
| BMC-Q2C0009H  | 9R0           | 5-13 Ω    |                |              |                         |
| BMC-Q2C0011H  | 11R           | 7-15 Ω    |                |              |                         |
| BMC-Q2C0015H  | 15R           | 9-21 Ω    |                | 0.050        | 3000                    |
| BMC-Q2C0019H  | 19R           | 12-25 Ω   |                |              |                         |
| BMC-Q2CY0026H | 26R           | ±25%      |                |              |                         |
| BMC-Q2CY0028H | 28R           |           |                |              |                         |
| BMC-Q2CY0030H | 30R           |           |                |              |                         |
| BMC-Q2CY0031H | 31R           |           |                |              |                         |

Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

BMC-Q 1204: High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q2CY0050H | 50R           | ±25%      | 100 MHz, 50 mV | 0.070        | 3000                    |
| BMC-Q2CY0060H | 60R           |           |                |              |                         |
| BMC-Q2CY0070H | 70R           |           |                |              |                         |
| BMC-Q2CY0080H | 80R           |           |                |              |                         |
| BMC-Q2CY0100H | 100R          |           |                |              |                         |
| BMC-Q2CY0120H | 120R          |           |                |              |                         |
| BMC-Q2CY0150H | 150R          |           |                | 0.120        | 2500                    |
| BMC-Q2CY0180H | 180R          |           |                |              |                         |
| BMC-Q2CY0220H | 220R          |           |                | 0.150        | 2000                    |
| BMC-Q2CY0300H | 300R          |           |                |              |                         |
| BMC-Q2CY0500H | 500R          |           |                | 0.200        |                         |
| BMC-Q2CY0600H | 600R          |           |                |              |                         |
| BMC-Q2CY0800H | 800R          |           |                | 0.250        |                         |
| BMC-Q2CY1000H | 1K0           |           |                |              |                         |
| BMC-Q2CY1200H | 1.2K0         |           |                | 0.350        | 1000                    |
| BMC-Q2CY1500H | 1.5K0         |           |                |              | 0.450                   |

BMC-Q 0402: Ultra High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q1E0000M  | ZR            | 0-15 Ω    | 100 MHz, 50 mV | 0.050        | 1800                    |
| BMC-Q1E0005M  | 5R0           | 0-15 Ω    |                |              |                         |
| BMC-Q1E0007M  | 7R0           | 0-11 Ω    |                |              |                         |
| BMC-Q1E0009M  | 9R0           | 5-13 Ω    |                |              |                         |
| BMC-Q1E0011M  | 11R           | 7-15 Ω    |                |              |                         |
| BMC-Q1E0015M  | 15R           | 9-21 Ω    |                |              |                         |
| BMC-Q1E0019M  | 19R           | 12-25 Ω   |                | 0.060        | 1500                    |
| BMC-Q1EY0030M | 30R           | ±25%      |                | 0.080        | 1300                    |
| BMC-Q1EY0060M | 60R           |           |                | 0.100        | 1000                    |
| BMC-Q1EY0070M | 70R           |           |                | 0.150        | 800                     |
| BMC-Q1EY0080M | 80R           |           |                |              |                         |
| BMC-Q1EY0100M | 100R          |           |                |              |                         |
| BMC-Q1EY0120M | 120R          |           |                | 0.200        | 700                     |
| BMC-Q1EY0150M | 150R          |           |                |              |                         |
| BMC-Q1EY0200M | 200R          |           |                | 0.250        | 600                     |
| BMC-Q1EY0220M | 220R          |           |                | 0.300        |                         |
| BMC-Q1EY0300M | 300R          |           |                | 0.400        |                         |
| BMC-Q1EY0500M | 500R          |           |                | 500          |                         |
| BMC-Q1EY0600M | 600R          |           |                |              | 0.500                   |
| BMC-Q1EY0800M | 800R          |           |                | 0.650        | 300                     |
| BMC-Q1EY1000M | 1K0           |           |                |              |                         |

# Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

## BMC-Q 0603: Ultra High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |        |      |
|---------------|---------------|-----------|----------------|--------------|-------------------------|--------|------|
| BMC-Q1J0000M  | ZR            | 0-15 Ω    | 100 MHz, 50 mV | 0.020        | 6000                    |        |      |
| BMC-Q1J0005M  | 5R0           |           |                |              |                         |        |      |
| BMC-Q1J0007M  | 7R0           |           |                |              |                         | 0-11 Ω |      |
| BMC-Q1J0009M  | 9R0           | 5-13 Ω    |                |              |                         |        |      |
| BMC-Q1J0011M  | 11R           |           |                | 7-15 Ω       |                         |        |      |
| BMC-Q1J0015M  | 15R           |           |                |              | 9-21 Ω                  |        |      |
| BMC-Q1J0019M  | 19R           | 12-25 Ω   |                |              |                         |        |      |
| BMC-Q1JY0030M | 30R           |           |                | ±25%         |                         | 0.030  | 5000 |
| BMC-Q1JY0050M | 50R           |           |                |              | 0.040                   |        |      |
| BMC-Q1JY0060M | 60R           | 0.060     |                |              |                         |        |      |
| BMC-Q1JY0070M | 70R           |           |                |              |                         | 0.065  | 2500 |
| BMC-Q1JY0080M | 80R           |           |                |              | 0.090                   |        |      |
| BMC-Q1JY0100M | 100R          | 0.120     |                |              |                         |        |      |
| BMC-Q1JY0120M | 120R          |           |                |              |                         | 0.180  | 1200 |
| BMC-Q1JY0150M | 150R          |           |                |              | 0.300                   |        |      |
| BMC-Q1JY0180M | 180R          | 0.400     |                |              |                         |        |      |
| BMC-Q1JY0220M | 220R          |           |                |              |                         |        |      |
| BMC-Q1JY0300M | 300R          |           |                |              |                         |        |      |
| BMC-Q1JY0500M | 500R          |           |                |              |                         |        |      |
| BMC-Q1JY0600M | 600R          |           |                |              |                         |        |      |
| BMC-Q1JY0800M | 800R          |           |                |              |                         |        |      |
| BMC-Q1JY1000M | 1K0           |           |                |              |                         |        |      |

## BMC-Q 0805: Ultra High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |      |
|---------------|---------------|-----------|----------------|--------------|-------------------------|------|
| BMC-Q2A0000M  | ZR            | 0~15 Ω    | 100 MHz, 50 mV | 0.010        | 6000                    |      |
| BMC-Q2A0005M  | 5R0           |           |                |              |                         |      |
| BMC-Q2A0007M  | 7R0           | 0~11 Ω    |                |              |                         |      |
| BMC-Q2A0009M  | 9R0           | 5~13 Ω    |                |              |                         |      |
| BMC-Q2A0011M  | 11R           | 7~15 Ω    |                |              |                         |      |
| BMC-Q2A0015M  | 15R           | 9~21 Ω    |                |              |                         |      |
| BMC-Q2A0019M  | 19R           | 12~25 Ω   |                |              |                         |      |
| BMC-Q2AY0030M | 30R           | ±25%      |                | 0.040        | 3500                    |      |
| BMC-Q2AY0031M | 31R           |           |                |              |                         |      |
| BMC-Q2AY0050M | 50R           |           |                |              | 0.050                   | 3000 |
| BMC-Q2AY0060M | 60R           |           |                |              |                         |      |
| BMC-Q2AY0070M | 70R           |           |                |              |                         |      |
| BMC-Q2AY0080M | 80R           |           |                | 0.080        | 2500                    |      |
| BMC-Q2AY0100M | 100R          |           |                |              |                         |      |
| BMC-Q2AY0120M | 120R          |           |                |              |                         |      |
| BMC-Q2AY0150M | 150R          |           |                |              |                         |      |

# Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

## BMC-Q 0805: Ultra High Current

| Part No.      | Impedance ( $\Omega$ ) | Tolerance  | Test Condition | DCR ( $\Omega$ ) max. | Rated Current (mA) max. |
|---------------|------------------------|------------|----------------|-----------------------|-------------------------|
| BMC-Q2AY0180M | 180R                   | $\pm 25\%$ | 100 MHz, 50 mV | 0.080                 | 2500                    |
| BMC-Q2AY0220M | 220R                   |            |                |                       |                         |
| BMC-Q2AY0300M | 300R                   |            |                |                       |                         |
| BMC-Q2AY0500M | 500R                   |            |                | 0.100                 | 2000                    |
| BMC-Q2AY0600M | 600R                   |            |                |                       |                         |
| BMC-Q2AY1000M | 1K0                    |            |                | 0.120                 | 1500                    |

## BMC-Q 1204: Ultra High Current

| Part No.      | Impedance (Ω) | Tolerance | Test Condition | DCR (Ω) max. | Rated Current (mA) max. |
|---------------|---------------|-----------|----------------|--------------|-------------------------|
| BMC-Q2C0000M  | ZR            | 0-15 Ω    | 100 MHz, 50 mV | 0.010        | 6000                    |
| BMC-Q2C0005M  | 5R0           |           |                |              |                         |
| BMC-Q2C0007M  | 7R0           | 0-11 Ω    |                |              |                         |
| BMC-Q2C0009M  | 9R0           |           |                | 5-13 Ω       |                         |
| BMC-Q2C0011M  | 11R           | 7-15 Ω    |                |              |                         |
| BMC-Q2C0015M  | 15R           |           |                | 9-21 Ω       |                         |
| BMC-Q2C0019M  | 19R           | 12-25 Ω   |                |              |                         |
| BMC-Q2CY0026M | 26R           |           |                | ±25%         |                         |
| BMC-Q2CY0028M | 28R           |           |                |              |                         |
| BMC-Q2CY0030M | 30R           |           |                |              |                         |
| BMC-Q2CY0031M | 31R           |           |                |              |                         |
| BMC-Q2CY0050M | 50R           |           |                |              |                         |
| BMC-Q2CY0060M | 60R           |           |                |              |                         |
| BMC-Q2CY0070M | 70R           |           |                |              |                         |
| BMC-Q2CY0080M | 80R           |           |                |              |                         |
| BMC-Q2CY0100M | 100R          |           |                |              |                         |
| BMC-Q2CY0120M | 120R          |           |                |              |                         |
| BMC-Q2CY0150M | 150R          |           |                |              |                         |
| BMC-Q2CY0180M | 180R          |           |                |              |                         |
| BMC-Q2CY0220M | 220R          |           |                |              |                         |
| BMC-Q2CY0300M | 300R          |           |                |              |                         |
| BMC-Q2CY0500M | 500R          |           |                |              |                         |
| BMC-Q2CY0600M | 600R          |           |                |              |                         |
| BMC-Q2CY0800M | 800R          |           |                |              |                         |
| BMC-Q2CY1000M | 1K0           |           |                |              |                         |

# Automotive Grade Multilayer Chip Beads

Type BMC-Q Series

## Environmental Characteristics

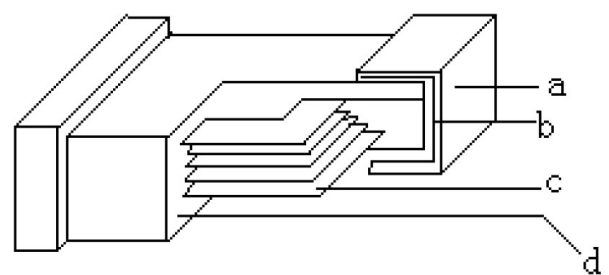
| Item                      | Requirement                                                                                | Test Condition                                                                                                                                                                                                                                                     |
|---------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High Temperature Exposure | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>MIL-STD-202 Method 108</b><br>Temperature: +125 °C, duration: 1000 hrs.<br>Measurement at 24 $\pm$ 4 hrs after test conclusion.                                                                                                                                 |
| Temperature Cycle         | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>JESD22 Method JA-104</b><br>Temperature: -40 °C to +125 °C, severity: 1000 cycles.<br>Measurement at 24 $\pm$ 4 hrs after test conclusion.                                                                                                                      |
| Biased Humidity           | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>MIL-STD-202 Method 103</b><br>Duration: 1000 hrs, temperature: 85 °C/85% RH. Unpowered.<br>Measurement at 24 $\pm$ 4 hrs after test conclusion.                                                                                                                 |
| Operational Life          | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>MIL-STD-202 Method 108</b><br>Temperature: +125 °C, duration: 1000 hrs.<br>Test current: half of rated current at normal temperature Measurement at 24 $\pm$ 4 hrs after test conclusion.                                                                       |
| Mechanical Shock          | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>MIL-STD-202 Method 213</b><br>Wave Form: Tolerance for half sine shock pulse. Peak value is 100 g's. Normal duration (D) is 6.<br>Three shocks in each direction shall be applied along the three mutually perpendicular axes of the test specimen (18 shocks). |
| Vibration                 | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | <b>MIL-STD-202 Method 204</b><br>5 g's for 20 min., 12 cycles each of 3 orientations, 10-2000 Hz.                                                                                                                                                                  |
| Resistance to Solder Heat | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | Temperature: 260 $\pm$ 5 °C, duration: 10 $\pm$ 1 seconds.                                                                                                                                                                                                         |
| Solderability             | More than 95% of electrode area should be coated by new solder.                            | Temperature: 245 $\pm$ 5 °C, duration: 3 $\pm$ 0.3 seconds.                                                                                                                                                                                                        |
| Board Flex                | No mechanical damage.<br>Impedance value should be within $\pm 30\%$ of the initial value. | The testing samples shall be mounted on a 100 mm $\times$ 40 mm FR4 PCB board, which is 1.6 mm $\pm$ 0.2 mm thick.<br>Bending shall be applied to the 2.0 mm with 1.0 mm/sec.<br>Duration, 60 $\pm$ 5 s.                                                           |
| Terminal Strength         | No mechanical damage<br>Impedance value should be within $\pm 30\%$ of the initial value.  | The testing samples shall be mounted on the testing epoxy boards, exerting force on side of the samples, Size 1005: 5 N ;<br>$\geq$ Size 1608: 17.7 N, Duration 60 $\pm$ 1 s.                                                                                      |

- Operating Temperature: -40 °C ~ 125 °C (Including self heating temperature rise.)
- Storage Temperature: -10 °C ~ 40 °C; Humidity: 30-70% RH

# Automotive Grade Multilayer Chip Beads

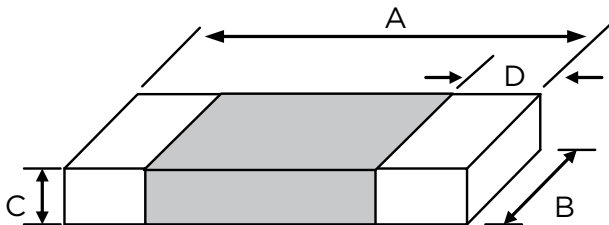
Type BMC-Q Series

## Construction



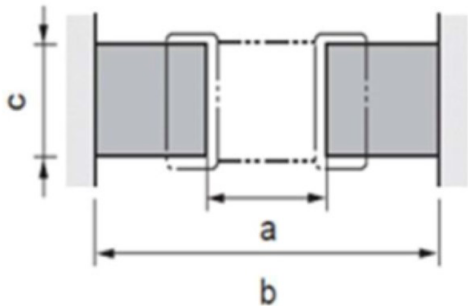
|   |                    |
|---|--------------------|
| a | Edge Electrode     |
| b | External Electrode |
| c | Inner electrode    |
| d | Ferrite            |

## Dimensions (Unit: mm)



| Type    | Size (Inch) | A (mm)     | B (mm)     | C (mm)     | D (mm)     |
|---------|-------------|------------|------------|------------|------------|
| BMC-Q1E | 0402        | 1.00 ±0.15 | 0.50 ±0.15 | 0.50 ±0.15 | 0.25 ±0.10 |
| BMC-Q1J | 0603        | 1.60 ±0.20 | 0.80 ±0.20 | 0.80 ±0.20 | 0.30 ±0.20 |
| BMC-Q2A | 0805        | 2.00 ±0.20 | 1.20 ±0.20 | 0.90 ±0.20 | 0.50 ±0.30 |
| BMC-Q2C | 1204        | 3.20 ±0.20 | 1.60 ±0.20 |            |            |

## Recommended PCB layout plan (Unit: mm)

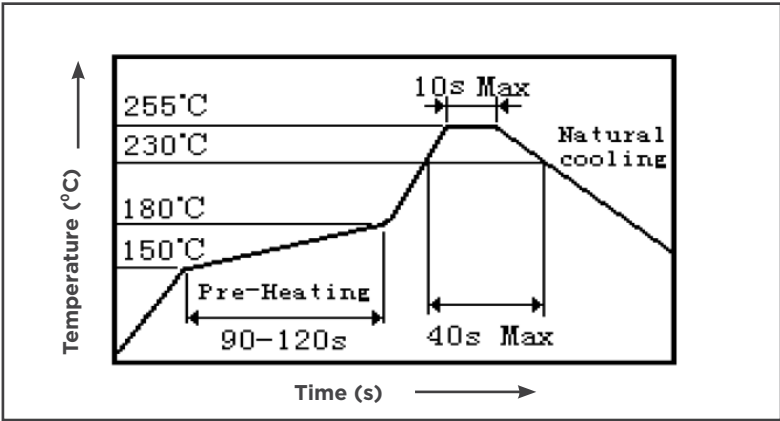


| Type    | Size (Inch) | A (mm) | B (mm) | C (mm) |
|---------|-------------|--------|--------|--------|
| BMC-Q1E | 0402        | 0.40   | 1.50   | 0.60   |
| BMC-Q1J | 0603        | 0.90   | 2.20   | 0.80   |
| BMC-Q2A | 0805        | 1.20   | 3.00   | 1.00   |
| BMC-Q2C | 1204        | 1.20   | 4.50   | 1.50   |

Automotive Grade Multilayer Chip Beads

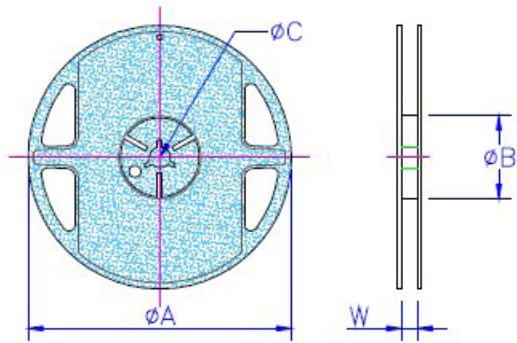
Type BMC-Q Series

Soldering Condition



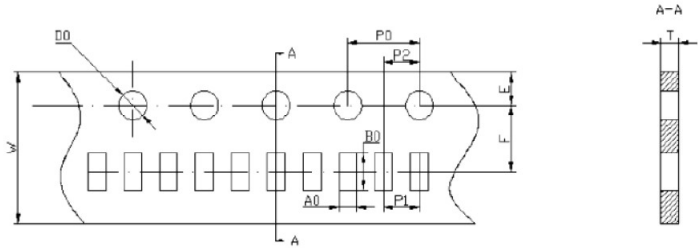
Packaging

Packaging Quantity & Reel Specifications (Unit: mm)



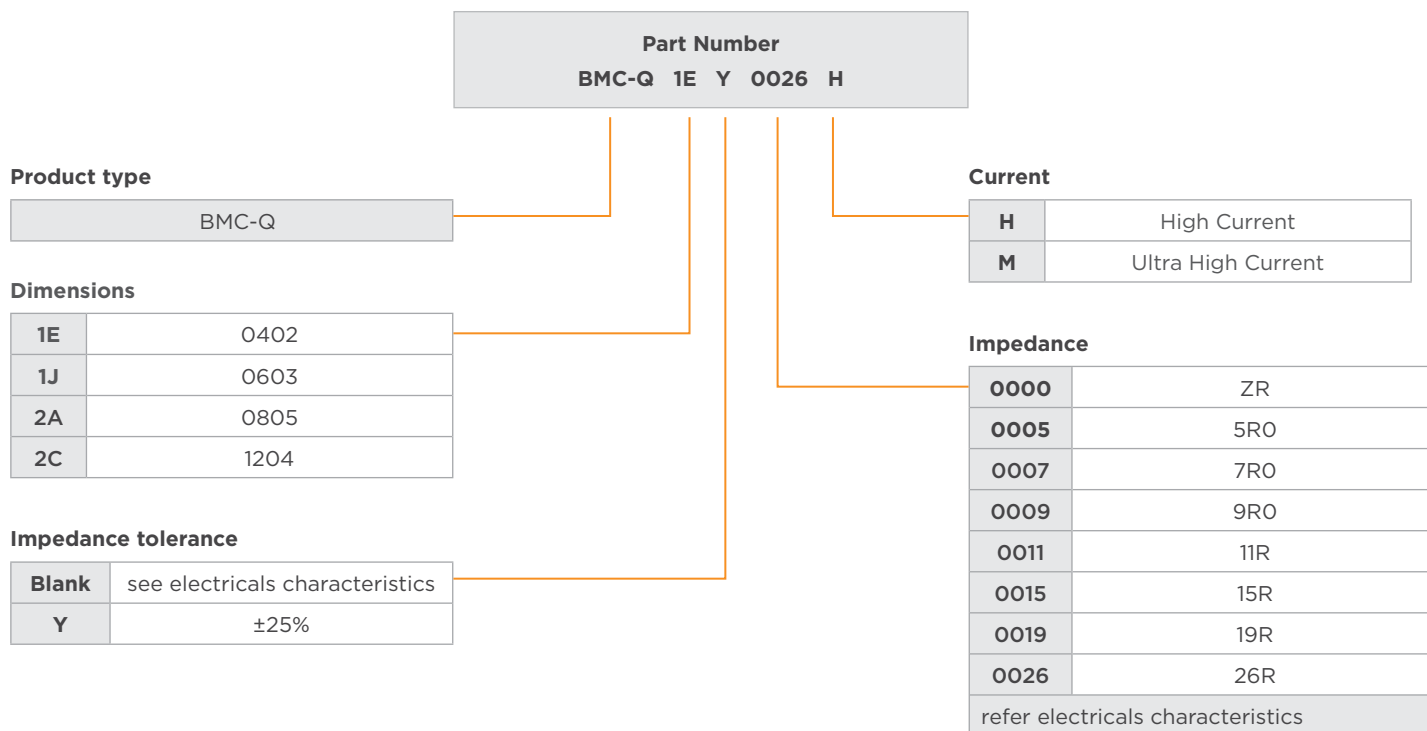
| Type    | Size (Inch) | ΦA       | ΦB      | ΦC        | W         | Quantity (EA) |
|---------|-------------|----------|---------|-----------|-----------|---------------|
| BMC-Q1E | 0402        | 178 ±2.0 | 57 ±2.0 | 12.5 ±1.5 | 8 +1.5/-0 | 10,000        |
| BMC-Q1J | 0603        |          |         |           |           | 4,000         |
| BMC-Q2A | 0805        |          |         |           |           |               |
| BMC-Q2C | 1204        |          |         |           |           |               |

Paper Tape Specifications (Unit: mm)



| Type    | A0         | B0         | W         | E          | F         | P0         | P1         | P2         | D0         | T          |
|---------|------------|------------|-----------|------------|-----------|------------|------------|------------|------------|------------|
| BMC-Q1E | 0.65 ±0.10 | 1.15 ±0.20 | 8.0 ±0.20 | 1.75 ±0.20 | 3.5 ±0.10 | 4.00 ±0.20 | 2.00 ±0.10 | 2.00 ±0.10 | 1.55 ±0.10 | 0.60 ±0.10 |
| BMC-Q1J | 1.10 ±0.20 | 1.90 ±0.20 |           |            |           |            | 4.00 ±0.20 |            |            | 0.95 ±0.10 |
| BMC-Q2A | 1.50 ±0.20 | 2.30 ±0.20 |           |            |           |            |            |            |            |            |
| BMC-Q2C | 1.90 ±0.20 | 3.50 ±0.20 |           |            |           |            |            |            |            |            |

## ORDERING INFORMATION



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