

Type BMB-B Series

Key Features

Effective EMI Protection

Wide Frequency Characteristics

High soldering Heat Resistance

Various Package Sizes Available

Suited to a Variety of Applications

Terminal finish matte Sn over Cu/Ni underplate



These beads are designed for high speed applications. The BMB-B Series will minimise the attenuation of the signal wave form due to its sharp impedance characteristics. This series is offered in 04:02, 06:03 and 08:05 package sizes

Electrical Performance

| Part Number | Impedance (Ω) at 100MHz | DC Resistance (Ω) maximum | Rated Current (mA) maximum |
|-----------------|----------------------------------|------------------------------------|----------------------------|
| BMB-1E-0022B-N7 | 22 \pm 25% | 0.20 | 300 |
| BMB-1E-0047B-N7 | 47 \pm 25% | 0.35 | |
| BMB-1E-0075B-N7 | 75 \pm 25% | 0.40 | |
| BMB-1E-0120B-N7 | 120 \pm 25% | | |
| BMB-1E-0220B-N7 | 220 \pm 25% | 0.60 | |
| BMB-1E-0300B-N7 | 300 \pm 25% | 0.80 | |
| BMB-1E-0022B-N7 | 22 \pm 25% | 0.20 | |
| BMB-1J-0030B-N7 | 30 \pm 25% | 0.30 | 250 |
| BMB-1J-0070B-N7 | 70 \pm 25% | 0.40 | 200 |
| BMB-1J-0120B-N7 | 120 \pm 25% | | |
| BMB-1J-0240B-N7 | 240 \pm 25% | | |
| BMB-1J-0300B-N7 | 300 \pm 25% | 0.50 | 100 |
| BMB-1J-0420B-N7 | 420 \pm 25% | | 200 |
| BMB-1J-0600B-N7 | 600 \pm 25% | 0.60 | 100 |
| BMB-2A-0007B-N7 | 7 \pm 25% | 0.10 | 300 |
| BMB-2A-0030B-N7 | 30 \pm 25% | 0.20 | |
| BMB-2A-0070B-N7 | 70 \pm 25% | 0.40 | |
| BMB-2A-0100B-N7 | 100 \pm 25% | | |
| BMB-2A-0120B-N7 | 120 \pm 25% | 0.50 | |
| BMB-2A-0200B-N7 | 200 \pm 25% | | |
| BMB-2A-0300B-N7 | 300 \pm 25% | | |
| BMB-2A-0450B-N7 | 450 \pm 25% | | |

Electrical Performance (continued)

| Part Number | Impedance (Ω) at 100MHz * 50MHz * 30MHz | DC Resistance (Ω) maximum | Rated Current (mA) maximum |
|-----------------|---|---------------------------------------|-------------------------------|
| BMB-2A-0600B-N7 | 600 \pm 25% | 0.60 | 200 |
| BMB-2A-0750B-N7 | 750 \pm 25% | 0.70 | |
| BMB-2A-1000B-N7 | 1000 \pm 25% | 0.80 | |

Operating temperature range - -55 ~ +125°C

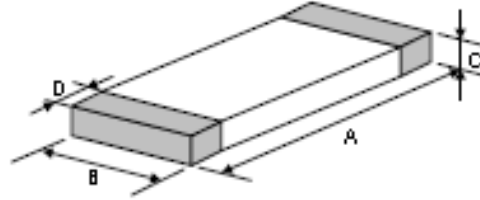
Temperature should be less than 25°C when rated current is applied.

Storage:

Temperature Range: -40 ~ +85°C

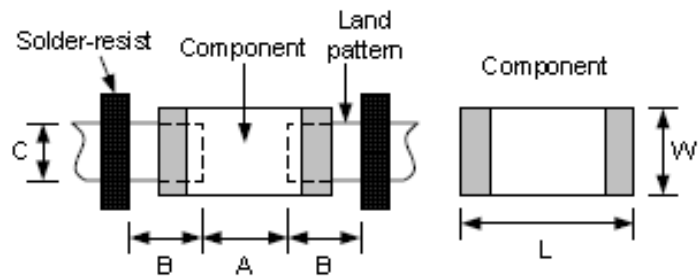
Humidity: Less than 75% RH

Product Dimensions



| Size | A (mm) | B (mm) | C (mm) | D (mm) |
|------|-----------|-----------|-----------|------------|
| 0402 | 1.0 ±0.10 | 0.5 ±0.10 | 0.5 ±0.10 | 0.25 ±0.10 |
| 0603 | 1.6 ±0.15 | 0.8 ±0.15 | 0.8 ±0.15 | 0.3 ±0.20 |
| 0805 | 2.0 ±0.20 | 1.2 ±0.20 | 0.9 ±0.20 | 0.5 ±0.30 |

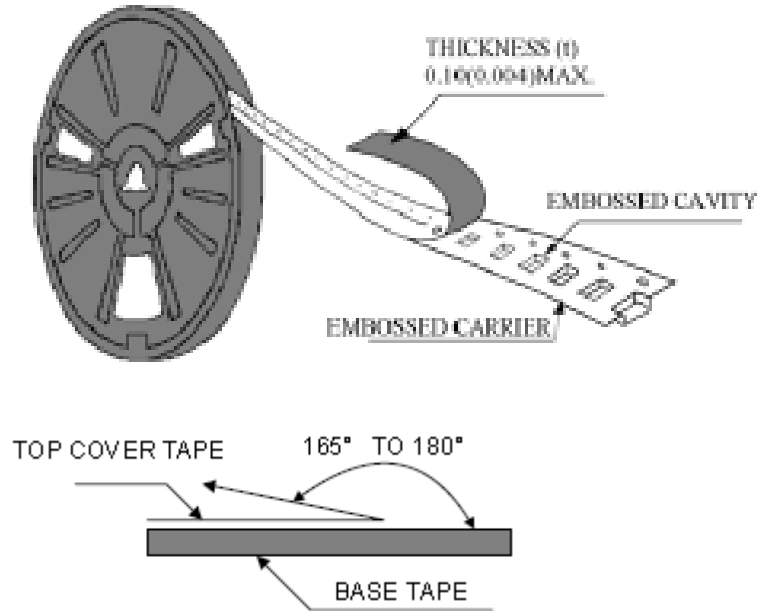
Recommended PCB Layout



| Size | 0402 | 0603 | 0805 | |
|-----------|-------------|-----------|-----------|-----|
| Component | L | 1.0 | 1.6 | 2.0 |
| | W | 0.5 | 0.8 | 1.2 |
| A | 0.45 ~ 0.55 | 0.6 ~ 0.8 | 0.8 ~ 1.2 | |
| B | 0.40 ~ 0.50 | 0.6 ~ 0.8 | 0.8 ~ 1.2 | |
| C | 0.40 ~ 0.50 | 0.6 ~ 0.8 | 0.9 ~ 1.6 | |

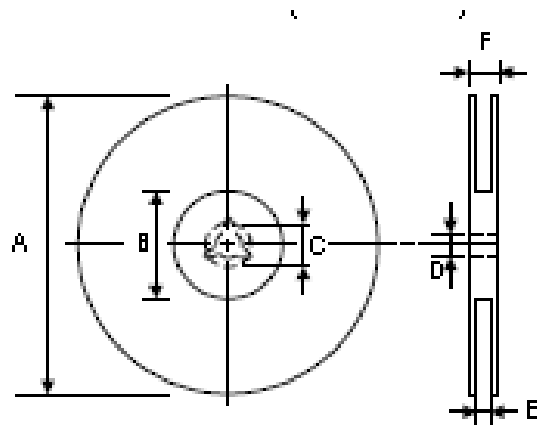
Packaging

Peel off force:

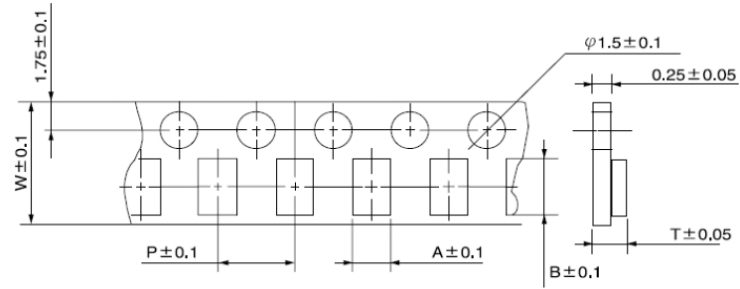


The force for peeling off cover tape is 10 grams in the direction shown

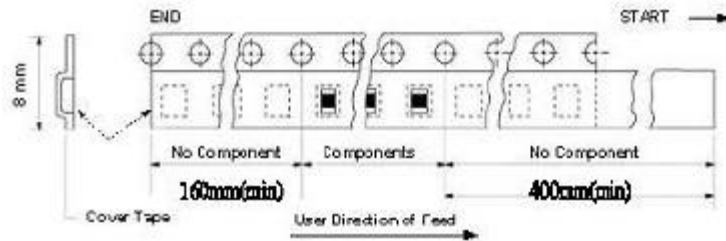
Dimensions (mm)



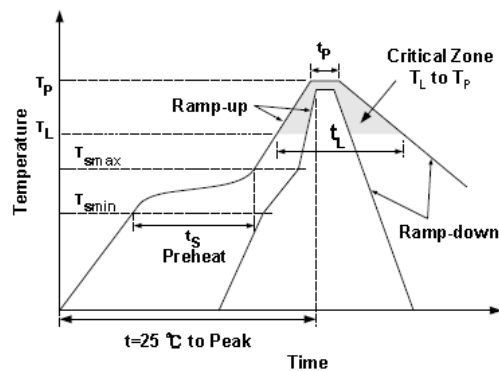
| A | B | C | D | E | F |
|--------|-----------------|----|---------|--------|---------|
| 178 ±1 | 60 +0.5 -0.1 | -- | 13 ±0.2 | 9 ±0.5 | 12 ±0.5 |



| Size | A | B | W | P | T | Chips / Reel |
|------|-----|-----|---|---|-----|--------------|
| 0402 | 0.6 | 1.1 | 8 | 2 | 1.0 | 10000 |
| 0603 | 1.1 | 1.9 | 8 | 4 | 1.1 | 4000 |
| 0805 | 1.5 | 2.3 | 8 | 4 | 1.3 | 4000 |
| 1206 | 1.9 | 3.5 | 8 | 4 | 1.5 | 3000 |



Recommended Reflow Solder Profile



| Profile Feature | | Pb Free |
|--|------------------|------------------|
| Preheat | ts | 60 ~ 180 seconds |
| | Tsmin | 150°C |
| | Tsmax | 200°C |
| Average Ramp up rate (Tsmax to Tp) | | 3°C/second max. |
| Time main above | Temperature (Tl) | 217°C |
| | Time (tl) | 60 ~ 150 seconds |
| Peak Temperature (Tp) | | 250 ~ 260°C |
| Time within 5°C of actual peak temperature ((tp) | | 10 seconds |
| Ramp down rate | | 6°C/second max. |
| Time 25°C to peak temperature | | 8 minutes max. |

Typical Characteristic Curves (T=25°C)

