

# MODEL BMB SERIES

## Surface Mount

## Multilayer Chip Beads

## 0402 -1812 Industry Sizes

NEW CURVES/NEW SIZES



### FEATURES AND BENEFITS

- Standard and high speed signals
- Monolithic construction for high reliability
- Choice of various sizes and materials for a wide range of applications
- Designed to offer high impedance for volume
- Compatible with vapor phase and infrared reflow soldering
- Wide frequency range — 10 MHz to 500 MHz

### APPLICATIONS

- Instrumentation
- Mobile communication equipment
- Notebook computers
- Video and audio equipment
- Video games
- Medical equipment

### ENVIRONMENTAL

Operating Temperature Range

Standard: -25°C to +85°C

Optional Extended Range: -40°C to +125°C

Storage Temperature Range

-40°C to +85°C, 70% R.H., Max.

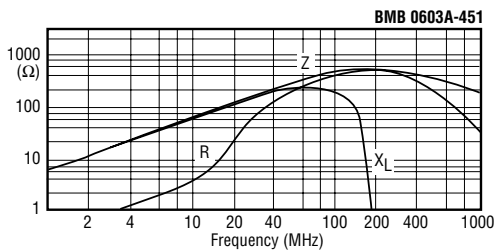
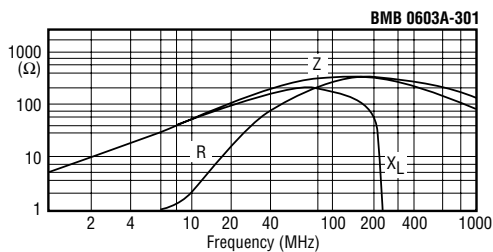
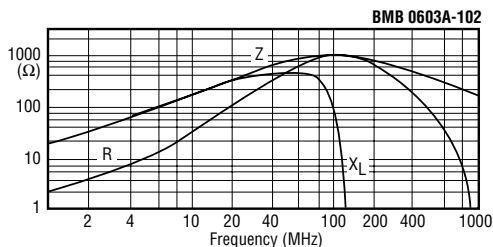
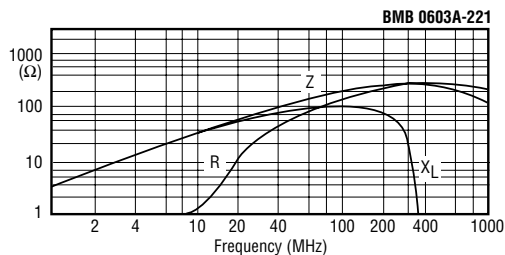
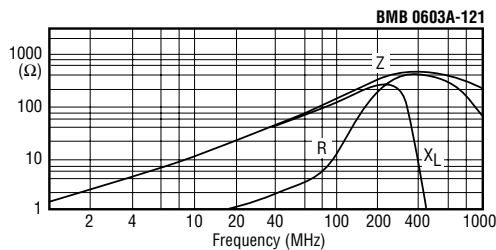
Resistance to Solder Heat

260°C for 10 sec.

Specifications subject to change without notice.

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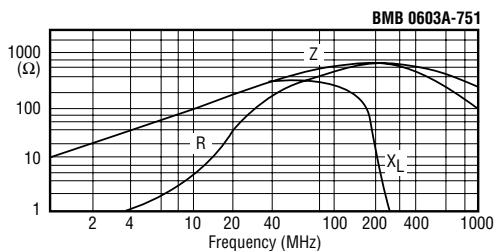
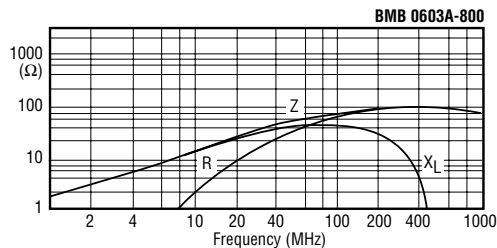
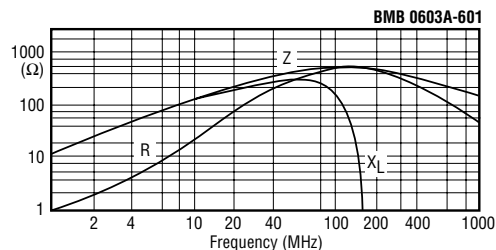
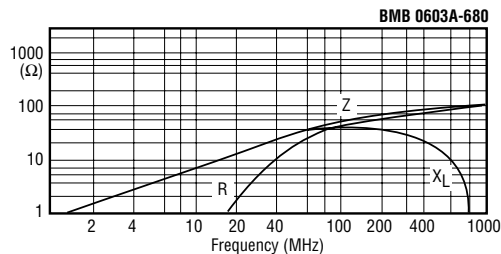
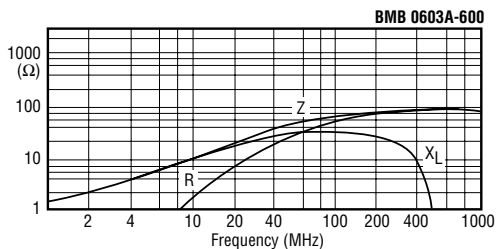
## 0603 IMPEDANCE VS. FREQUENCY - STANDARD SPEED



## 0402 & 0603 ELECTRICAL CHARACTERISTICS - STANDARD SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC<br>Resistance<br>$\Omega$ Max. | Rated<br>Current<br>mA Max. |
|---------------|-----------------------------------------------|-----------------------------------|-----------------------------|
| BMB 0402A-600 | 60                                            | 0.30                              | 200                         |
| BMB 0402A-121 | 120                                           | 0.40                              | 150                         |
| BMB 0402A-301 | 300                                           | 0.80                              | 50                          |
| BMB 0402A-601 | 600                                           | 1.00                              | 50                          |
| BMB 0603A-100 | 10                                            | 0.05                              | 500                         |
| BMB 0603A-300 | 30                                            | 0.09                              | 500                         |
| BMB 0603A-400 | 40                                            | 0.10                              | 400                         |
| BMB 0603A-600 | 60                                            | 0.10                              | 400                         |
| BMB 0603A-680 | 68                                            | 0.10                              | 200                         |

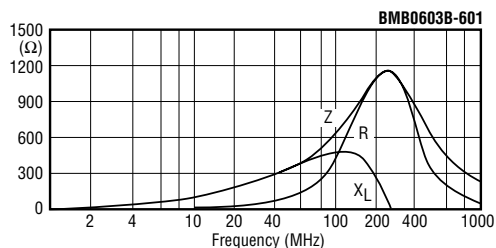
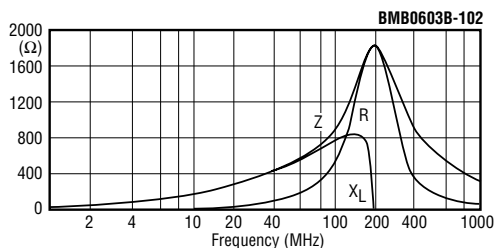
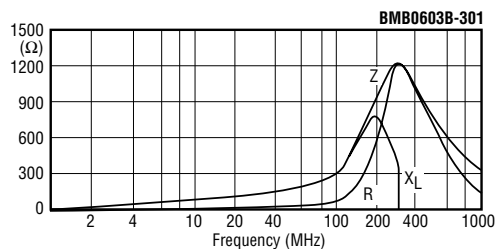
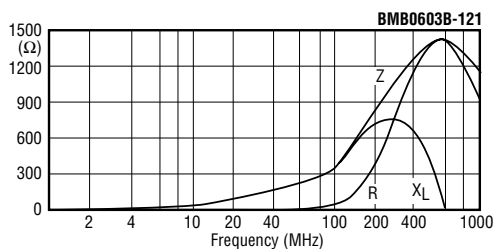
## 0603 IMPEDANCE VS. FREQUENCY - STANDARD SPEED



## 0603 ELECTRICAL CHARACTERISTICS - STANDARD SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC<br>Resistance<br>$\Omega$ Max. | Rated<br>Current<br>mA Max. |
|---------------|-----------------------------------------------|-----------------------------------|-----------------------------|
| BMB 0603A-800 | 80                                            | 0.20                              | 150                         |
| BMB 0603A-121 | 120                                           | 0.20                              | 150                         |
| BMB 0603A-181 | 180                                           | 0.30                              | 150                         |
| BMB 0603A-221 | 220                                           | 0.30                              | 150                         |
| BMB 0603A-301 | 300                                           | 0.35                              | 150                         |
| BMB 0603A-451 | 450                                           | 0.40                              | 100                         |
| BMB 0603A-601 | 600                                           | 0.45                              | 100                         |
| BMB 0603A-751 | 750                                           | 0.60                              | 100                         |
| BMB 0603A-102 | 1000                                          | 0.60                              | 100                         |

## 0603 IMPEDANCE VS. FREQUENCY - HIGH SPEED

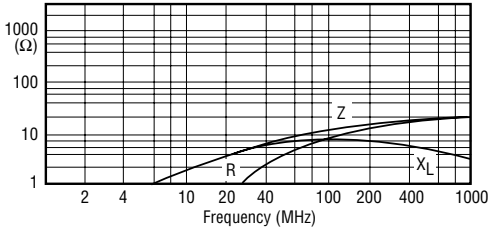


## 0603 ELECTRICAL CHARACTERISTICS - HIGH SPEED

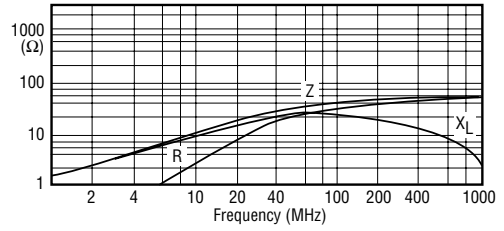
| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC Resistance<br>$\Omega$ Max. | Rated Current<br>mA Max. |
|---------------|-----------------------------------------------|--------------------------------|--------------------------|
| BMB 0603B-121 | 120                                           | 0.20                           | 150                      |
| BMB 0603B-301 | 300                                           | 0.35                           | 150                      |
| BMB 0603B-601 | 600                                           | 0.45                           | 100                      |
| BMB 0603B-102 | 1200                                          | 0.60                           | 100                      |

# 0805 IMPEDANCE VS. FREQUENCY - STANDARD SPEED

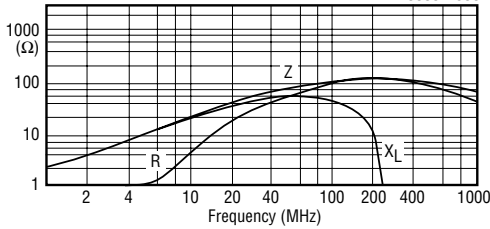
**BMB 0805A-110**



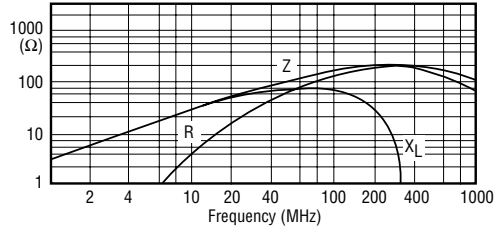
**BMB 0805A-400**



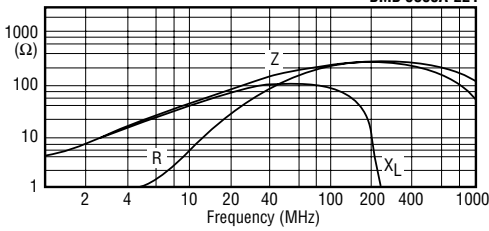
**BMB 0805A-900**



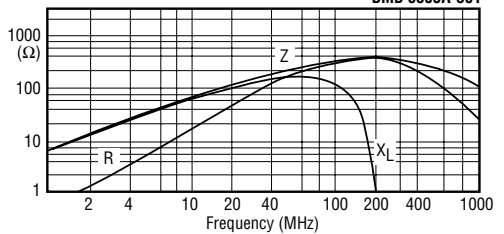
**BMB 0805A-121**



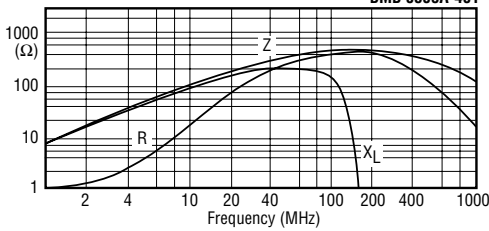
**BMB 0805A-221**



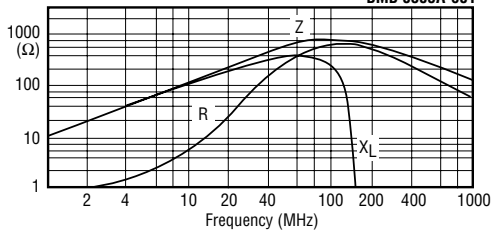
**BMB 0805A-301**



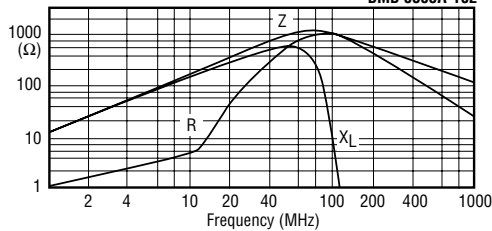
**BMB 0805A-401**



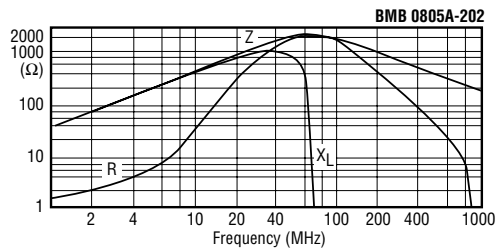
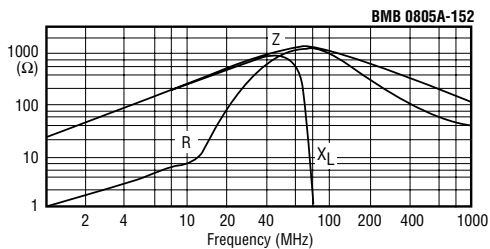
**BMB 0805A-601**



**BMB 0805A-102**



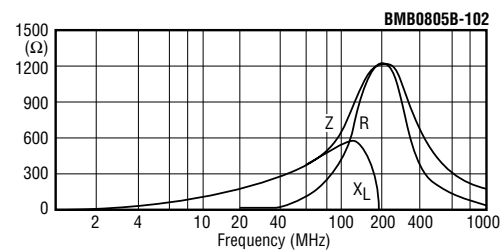
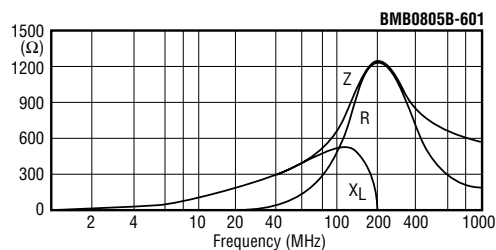
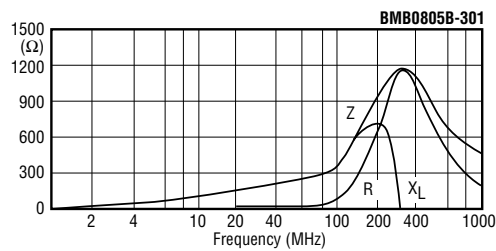
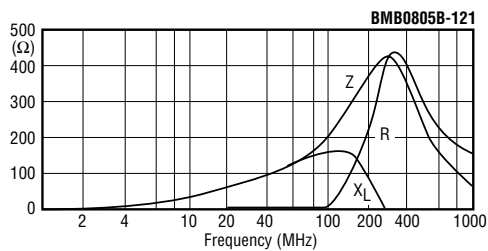
## 0805 IMPEDANCE VS. FREQUENCY - STANDARD SPEED



## 0805 ELECTRICAL CHARACTERISTICS - STANDARD SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC<br>Resistance<br>$\Omega$ Max. | Rated<br>Current<br>mA Max. |
|---------------|-----------------------------------------------|-----------------------------------|-----------------------------|
| BMB 0805A-070 | 7                                             | 0.06                              | 300                         |
| BMB 0805A-110 | 11                                            | 0.06                              | 600                         |
| BMB 0805A-170 | 17                                            | 0.06                              | 600                         |
| BMB 0805A-260 | 26                                            | 0.06                              | 600                         |
| BMB 0805A-320 | 32                                            | 0.06                              | 600                         |
| BMB 0805A-400 | 40                                            | 0.15                              | 300                         |
| BMB 0805A-600 | 60                                            | 0.15                              | 300                         |
| BMB 0805A-800 | 80                                            | 0.15                              | 300                         |
| BMB 0805A-900 | 90                                            | 0.15                              | 300                         |
| BMB 0805A-121 | 120                                           | 0.15                              | 300                         |
| BMB 0805A-151 | 150                                           | 0.15                              | 300                         |
| BMB 0805A-181 | 180                                           | 0.20                              | 200                         |
| BMB 0805A-221 | 220                                           | 0.20                              | 200                         |
| BMB 0805A-301 | 300                                           | 0.20                              | 200                         |
| BMB 0805A-401 | 400                                           | 0.30                              | 200                         |
| BMB 0805A-601 | 600                                           | 0.30                              | 200                         |
| BMB 0805A-102 | 1000                                          | 0.35                              | 100                         |
| BMB 0805A-152 | 1500                                          | 0.40                              | 100                         |
| BMB 0805A-202 | 2000                                          | 0.50                              | 80                          |
| BMB 0805A-222 | 2200                                          | 0.60                              | 80                          |

## 0805 IMPEDANCE VS. FREQUENCY - HIGH SPEED

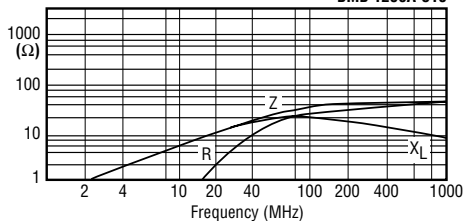


## 0805 ELECTRICAL CHARACTERISTICS - HIGH SPEED

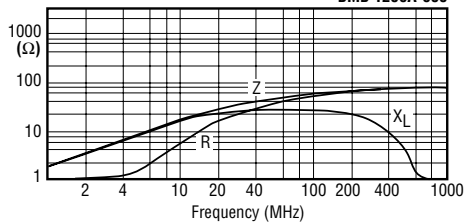
| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC Resistance<br>$\Omega$ Max. | Rated Current<br>mA Max. |
|---------------|-----------------------------------------------|--------------------------------|--------------------------|
| BMB 0805B-121 | 120                                           | 0.15                           | 300                      |
| BMB 0805B-301 | 300                                           | 0.20                           | 200                      |
| BMB 0805B-601 | 600                                           | 0.30                           | 200                      |
| BMB 0805B-102 | 1000                                          | 0.35                           | 100                      |

# 1206 IMPEDANCE VS. FREQUENCY - STANDARD SPEED

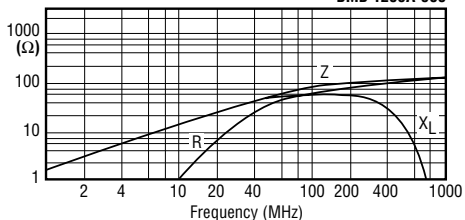
**BMB 1206A-310**



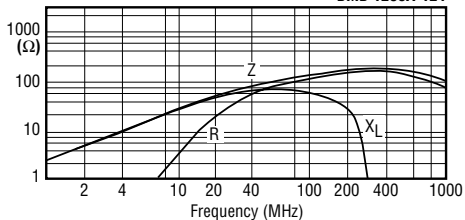
**BMB 1206A-600**



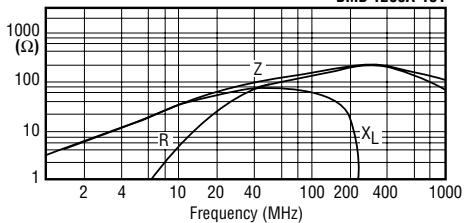
**BMB 1206A-900**



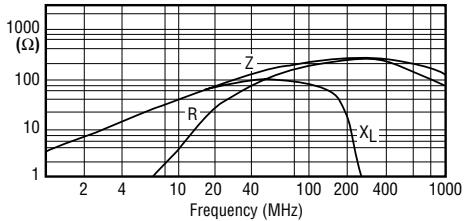
**BMB 1206A-121**



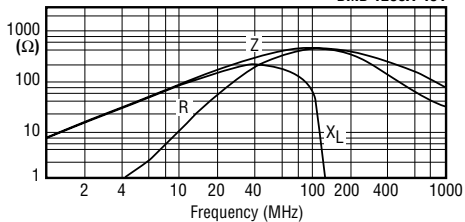
**BMB 1206A-151**



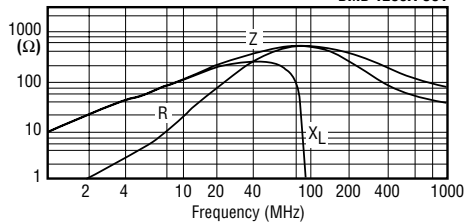
**BMB 1206A-201**



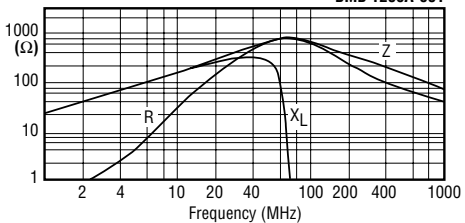
**BMB 1206A-401**



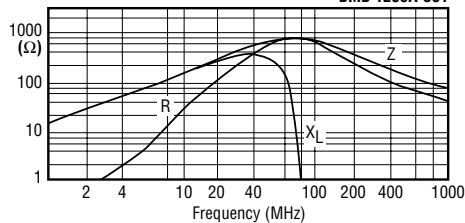
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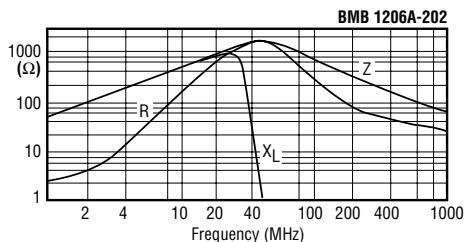
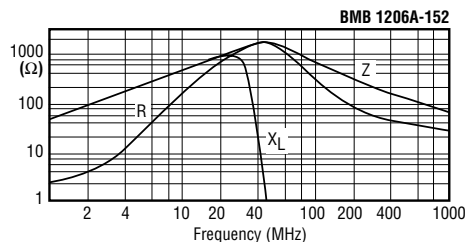
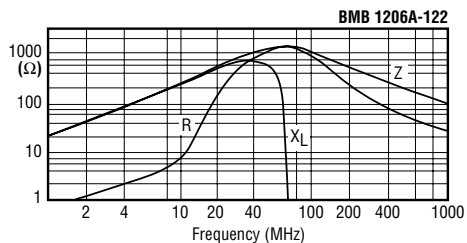
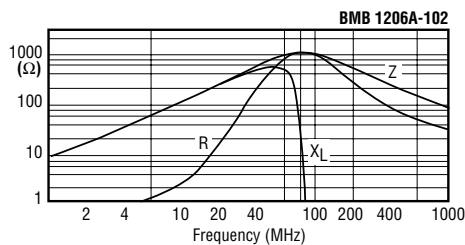
**BMB 1206A-601**



**BMB 1206A-801**



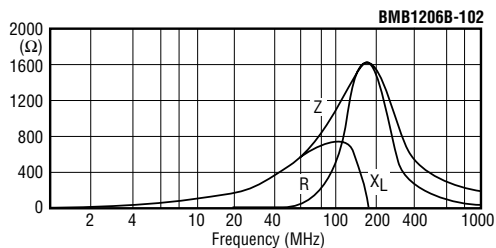
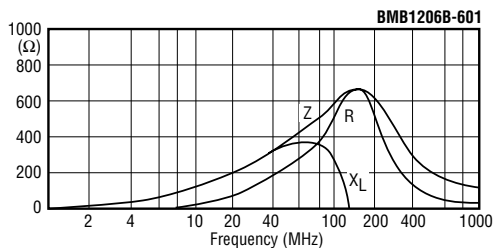
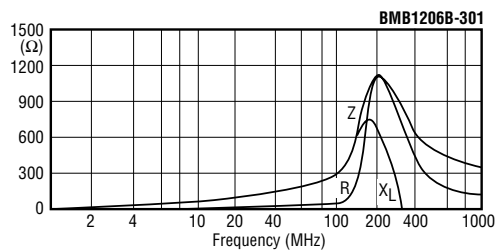
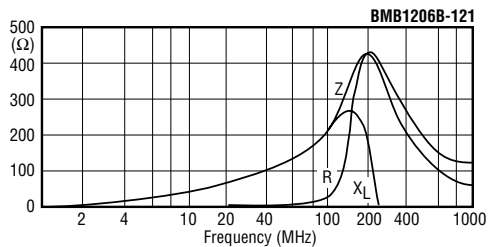
## 1206 IMPEDANCE VS. FREQUENCY - STANDARD SPEED



## 1206 ELECTRICAL CHARACTERISTICS - STANDARD SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC Resistance<br>$\Omega$ Max. | Rated Current<br>mA Max. |
|---------------|-----------------------------------------------|--------------------------------|--------------------------|
| BMB 1206A-260 | 26                                            | 0.08                           | 500                      |
| BMB 1206A-310 | 31                                            | 0.08                           | 600                      |
| BMB 1206A-500 | 50                                            | 0.08                           | 600                      |
| BMB 1206A-600 | 60                                            | 0.10                           | 400                      |
| BMB 1206A-700 | 70                                            | 0.10                           | 600                      |
| BMB 1206A-900 | 90                                            | 0.15                           | 400                      |
| BMB 1206A-121 | 120                                           | 0.15                           | 400                      |
| BMB 1206A-151 | 150                                           | 0.15                           | 300                      |
| BMB 1206A-201 | 200                                           | 0.20                           | 300                      |
| BMB 1206A-401 | 400                                           | 0.20                           | 200                      |
| BMB 1206A-501 | 500                                           | 0.25                           | 200                      |
| BMB 1206A-601 | 600                                           | 0.30                           | 200                      |
| BMB 1206A-801 | 800                                           | 0.30                           | 200                      |
| BMB 1206A-102 | 1000                                          | 0.40                           | 200                      |
| BMB 1206A-122 | 1200                                          | 0.40                           | 100                      |
| BMB 1206A-152 | 1500                                          | 0.50                           | 100                      |
| BMB 1206A-202 | 2000                                          | 0.50                           | 100                      |

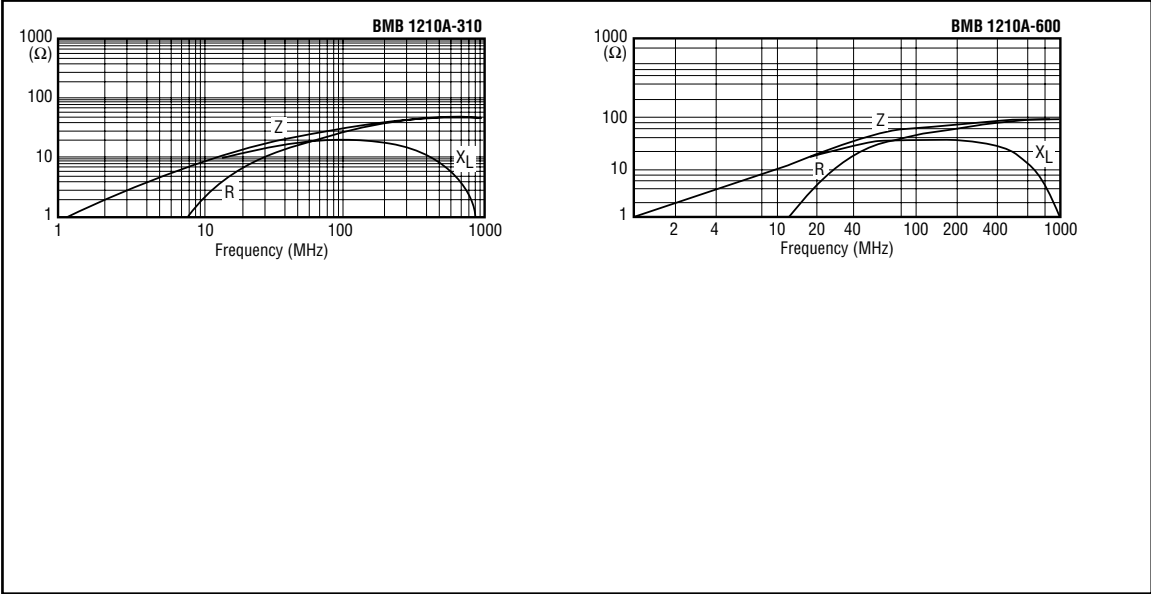
## 1206 IMPEDANCE VS. FREQUENCY - HIGH SPEED



## 1206 ELECTRICAL CHARACTERISTICS - HIGH SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC Resistance<br>$\Omega$ Max. | Rated Current<br>mA Max. |
|---------------|-----------------------------------------------|--------------------------------|--------------------------|
| BMB 1206B-121 | 120                                           | 0.15                           | 400                      |
| BMB 1206B-301 | 300                                           | 0.20                           | 200                      |
| BMB 1206B-601 | 600                                           | 0.30                           | 200                      |
| BMB 1206B-102 | 1000                                          | 0.40                           | 200                      |

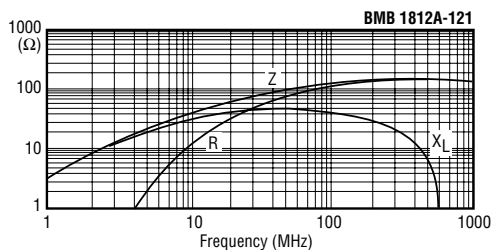
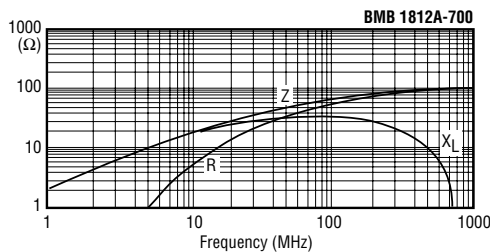
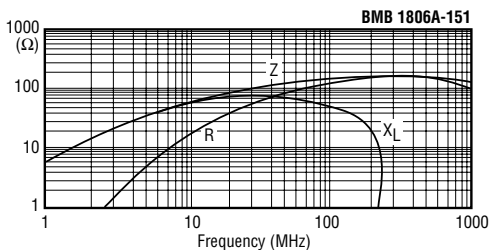
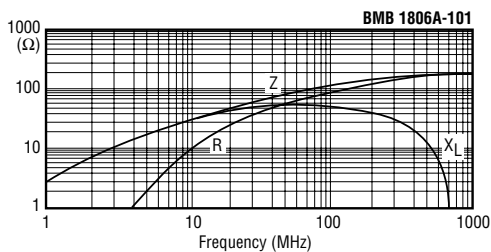
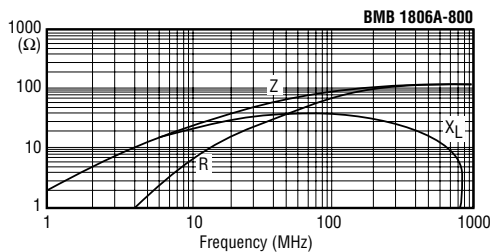
**1210 IMPEDANCE VS. FREQUENCY - STANDARD SPEED**



**1210 ELECTRICAL CHARACTERISTICS - STANDARD SPEED**

| Part Number   | Impedance<br>Z Ω ± 25%<br>@ 100 MHz | DC Resistance<br>Ω Max. | Rated Current<br>mA Max. |
|---------------|-------------------------------------|-------------------------|--------------------------|
| BMB 1210A-310 | 31                                  | 0.3                     | 400                      |
| BMB 1210A-600 | 60                                  | 0.3                     | 400                      |
| BMB 1210A-900 | 90                                  | 0.3                     | 400                      |

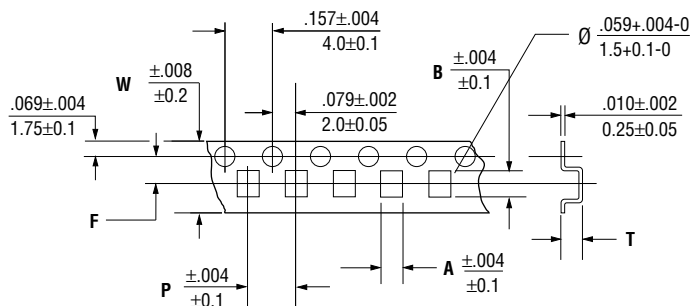
## 1806 & 1812 IMPEDANCE VS. FREQUENCY - STANDARD SPEED



## 1806 & 1812 ELECTRICAL CHARACTERISTICS - STANDARD SPEED

| Part Number   | Impedance<br>$Z \Omega \pm 25\%$<br>@ 100 MHz | DC Resistance<br>$\Omega$ Max. | Rated Current<br>mA Max. |
|---------------|-----------------------------------------------|--------------------------------|--------------------------|
| BMB 1806A-800 | 80                                            | 0.3                            | 400                      |
| BMB 1806A-101 | 100                                           | 0.3                            | 300                      |
| BMB 1806A-151 | 150                                           | 0.5                            | 200                      |
| BMB 1812A-700 | 70                                            | 0.4                            | 200                      |
| BMB 1812A-121 | 120                                           | 0.4                            | 200                      |

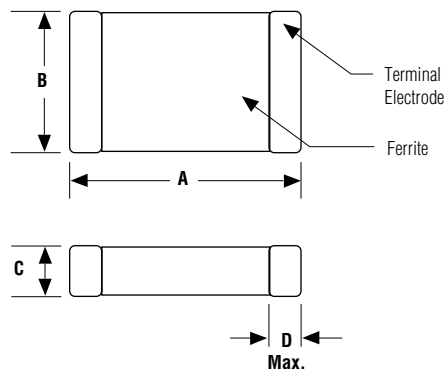
# PACKAGING (Inch/mm)



Tape Material: Polystyrene

| Part #          | A    | B    | F    | W    | P    | T    | 7" Reel Diameter (Qty./Reel) |
|-----------------|------|------|------|------|------|------|------------------------------|
| BMB 1812 (4532) | .142 | .193 | .217 | .472 | .315 | .075 | 1,000                        |
| BMB 1806 (4516) | .075 | .193 | .217 | .472 | .158 | .079 | 2,000                        |
| BMB 1210 (3225) | .114 | .142 | .138 | .315 | .158 | .067 | 2,000                        |
| BMB 1206 (3216) | .075 | .138 | .138 | .315 | .158 | .059 | 3,000                        |
| BMB 0805 (2012) | .059 | .091 | .138 | .315 | .158 | .051 | 4,000                        |
| BMB 0603 (1608) | .047 | .075 | .138 | .315 | .158 | .049 | 4,000                        |
| BMB 0402 (1005) | .026 | .045 | .138 | .315 | .158 | .032 | 6,000                        |

# OUTLINE DIMENSIONS (Inch/mm)



| Part #          | A Dim.    | B Dim.    | C Dim.    | D Dim. |
|-----------------|-----------|-----------|-----------|--------|
| BMB 0402 (1005) | .04±.007  | .02±.008  | .02±.008  | .012   |
| BMB 0603 (1608) | .063±.006 | .031±.006 | .031±.006 | .018   |
| BMB 0805 (2012) | .079±.008 | .049±.008 | .035±.008 | .024   |
| BMB 1206 (3216) | .126±.008 | .063±.008 | .043±.008 | .028   |
| BMB 1210 (3225) | .126±.008 | .098±.008 | .051±.008 | .028   |
| BMB 1806 (4516) | .18±.008  | .063±.008 | .063±.008 | .028   |
| BMB 1812 (4532) | .18±.008  | .126±.008 | .06±.01   | .031   |

## ORDERING INFORMATION

