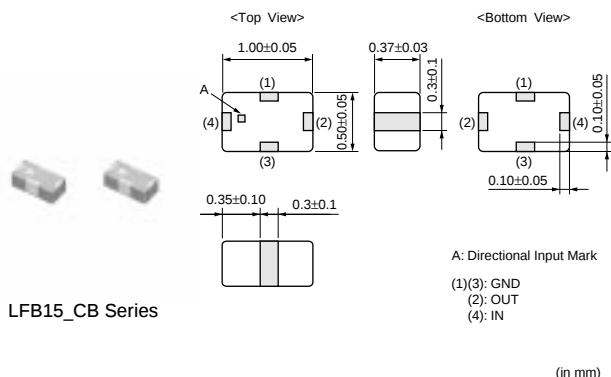


# for RF/Local

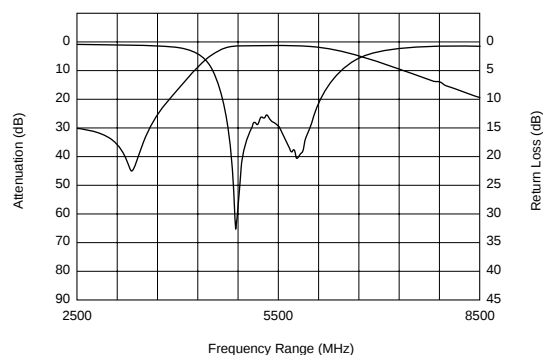
## Chip Multilayer LC Filters (BPF)

### ● LFB15(0402)\_CB Series



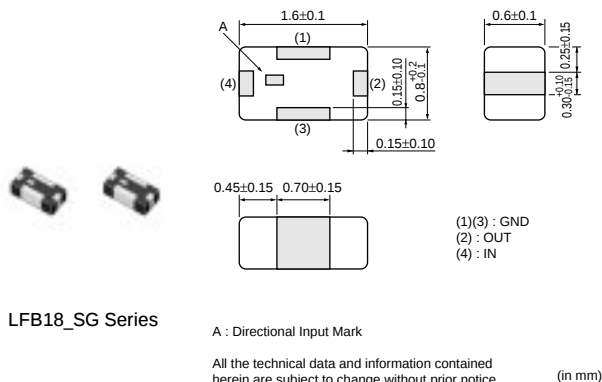
LFB15\_CB Series

### Frequency Characteristics



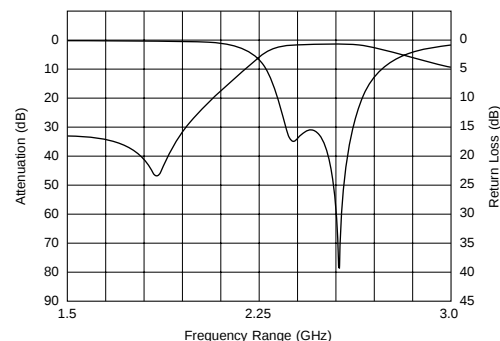
| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB155G37CB1C032 | 5375                                | fo±475               | 1.5 max. (at 25°C)        | 10 min. at 3800MHz                   | 5 min. at 7500MHz                     | WLAN/BT     |
| LFB155G50CB1B948 | 5500                                | fo±350               | 1.1 max. (at 25°C)        | 9.5 min. at 4000MHz                  | 4.5 min. at 7500MHz                   | WLAN/BT     |

### ● LFB18(0603)\_SG Series



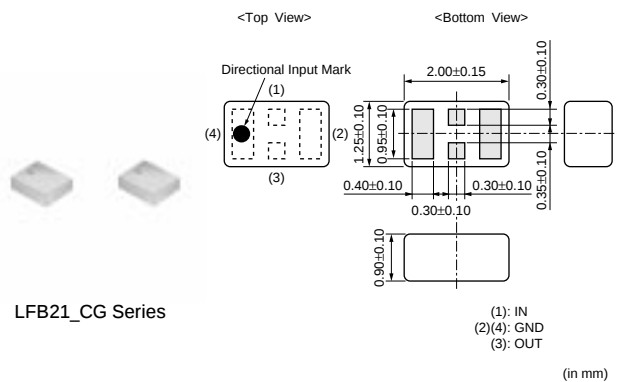
LFB18\_SG Series

### Frequency Characteristics

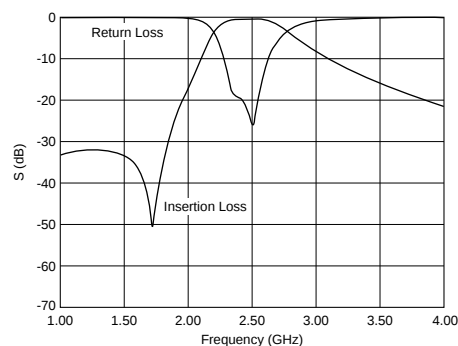


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB182G45SG9A213 | 2450                                | fo±50                | 2.2 max. (at 25°C)        | 24 min. at 880~960MHz                | 20 min. at 1710~1990MHz               | WLAN/BT     |
| LFB182G45SG9A246 | 2450                                | fo±50                | 2.2 max. (at 25°C)        | 24.5 min. at 880~960MHz              | 12.5 min. at 1710~1990MHz             | WLAN/BT     |
| LFB182G45SG9A272 | 2450                                | fo±50                | 1.8 max. (at 25°C)        | 25 min. at 880~1000MHz               | 22.5 min. at 1200~1300MHz             | WLAN/BT     |
| LFB182G60SGHB972 | 2600                                | fo±100.0             | 1.9 max. (at 25°C)        | 29.5 min. at 806~849MHz              | 25 min. at 1850~1910MHz               | WIMAX       |
| LFB182G60SGHC149 | 2600                                | fo±100.0             | 2.2 max. (at 25°C)        | 29.5 min. at 806~849MHz              | 30 min. at 1850~1910MHz               | WIMAX       |
| LFB183G60SGJC019 | 3500                                | fo±200               | 1.8 max. (at 25°C)        | 25.5 min. at 806~849MHz              | 21.5 min. at 1850~1910MHz             | WIMAX       |
| LFB185G78SGAB713 | 5787.5                              | fo±62.5              | 2.2 max. (at 25°C)        | 16.5 min. at 4800MHz                 | 23.5 min. at 11450~11700MHz           | WLAN/BT     |

## ● LFB21(0805)\_CG Series

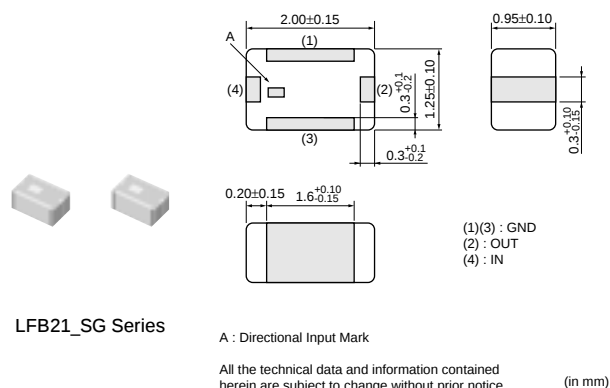


Frequency Characteristics

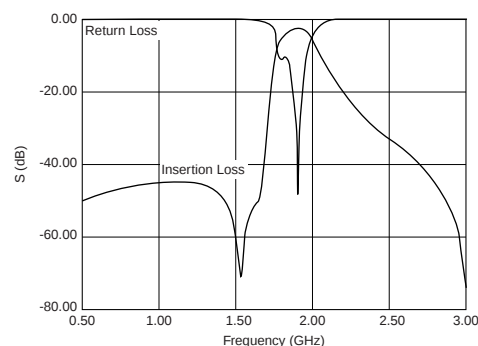


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB212G45CG1B187 | 2450.00                             | fo±50.00             | 0.90 max.<br>(at 25°C)    | 28 min.<br>at 824~960MHz             | 15 min.<br>at 1710~1910MHz            | WLAN/BT     |
| LFB212G45CG1B982 | 2450.00                             | fo±50.00             | 1.00 max.<br>(at 25°C)    | 28 min.<br>at 824~849MHz             | 17 min.<br>at 1920~1990MHz            | WLAN/BT     |
| LFB212G45CG2D013 | 2450.00                             | fo±50.00             | 2.50 max.<br>(at 25°C)    | 30 min.<br>at 824~915MHz             | 32 min.<br>at 1920~1980MHz            | WLAN/BT     |

## ● LFB21(0805)\_SG Series



Frequency Characteristics



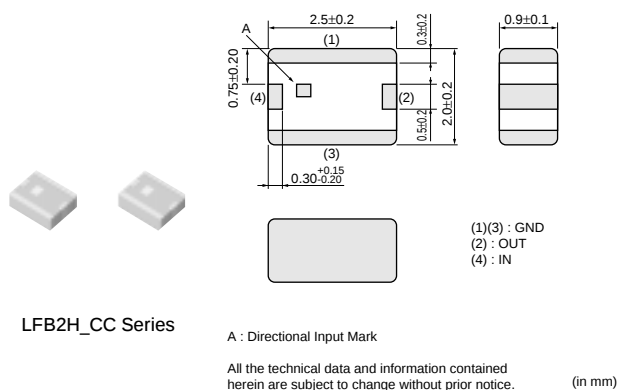
| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB211G90SG8B704 | 1906.5                              | fo±13.5              | 3.0 max.<br>(at 25°C)     | 20 min.<br>at 1660.5~1686.3MHz       | 11 min.<br>at 2126.8~2152.6MHz        | PHS         |
| LFB212G45SG8A127 | 2450                                | fo±50                | 1.5 max.<br>(at 25°C)     | 25 min.<br>at 1200~1300MHz           | 10.0 min.<br>at 2000MHz               | WLAN/BT     |
| LFB212G45SG8A143 | 2450                                | fo±50                | 2.7 max.<br>(at 25°C)     | 20 min.<br>at 880~1710MHz            | 30 min.<br>at 1710~1990MHz            | WLAN/BT     |
| LFB212G45SG8A166 | 2450                                | fo±50                | 1.4 max.<br>(at 25°C)     | 30 min.<br>at 824~960MHz             | 30 min.<br>at 1710~1910MHz            | WLAN/BT     |
| LFB212G45SG8A192 | 2450                                | fo±50                | 2.6 max.<br>(at 25°C)     | 40 min.<br>at 880~960MHz             | 38 min.<br>at 1710~1990MHz            | WLAN/BT     |
| LFB212G49SG8B830 | 2495                                | fo±195               | 2.4 max.<br>(at 25°C)     | 30 min.<br>at 824~960MHz             | 9 min.<br>at 1710~1990MHz             | WIMAX       |
| LFB213G60SG8B831 | 3600                                | fo±300               | 1.5 max.<br>(at 25°C)     | 32 min.<br>at 824~960MHz             | 24 min.<br>at 1710~1990MHz            | WIMAX       |
| LFB215G12SG8A178 | 5125                                | fo±225               | 1.5 max.<br>(at 25°C)     | 25 min.<br>at 4200MHz                | 17 min.<br>at 2x(fo±225)MHz           | WLAN/BT     |
| LFB215G12SG8A183 | 5125                                | fo±225               | 1.5 max.<br>(at 25°C)     | 9.0 min.<br>at 4250MHz               | 9.5 min.<br>at 5900MHz                | WLAN/BT     |

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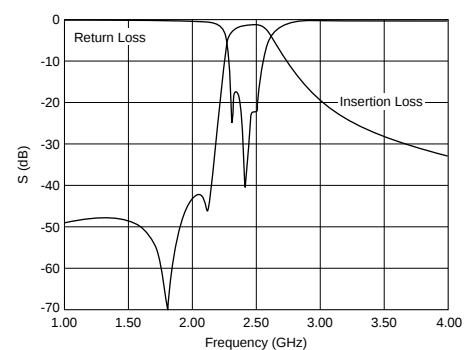
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| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB215G25SG8A144 | 5250                                | fo±100.0             | 1.5 max.<br>(at 25°C)     | 30 min.<br>at 3450MHz                | -                                     | WLAN/BT     |
| LFB215G37SG8A180 | 5375                                | fo±475               | 1.8 max.<br>(at 25°C)     | 30.0 min.<br>at 500~4000MHz          | 35.0 min.<br>at 3450MHz               | WLAN/BT     |
| LFB215G37SG8A185 | 5375                                | fo±475               | 2.2 max.<br>(at 25°C)     | 40 min.<br>at 340~1195MHz            | 21 min.<br>at 2140~3580MHz            | WLAN/BT     |
| LFB215G51SG8A132 | 5512                                | fo±363               | 1.9 max.<br>(at 25°C)     | 30 min.<br>at 500~4000MHz            | 20 min.<br>at 4600MHz                 | WLAN/BT     |
| LFB215G78SG8A170 | 5787.5                              | fo±62.5              | 2.2 max.<br>(at 25°C)     | 35 min.<br>at 3275~3400MHz           | 37 min.<br>at 2x(fo±62.5)MHz          | WLAN/BT     |

## ● LFB2H(1008)\_CC Series

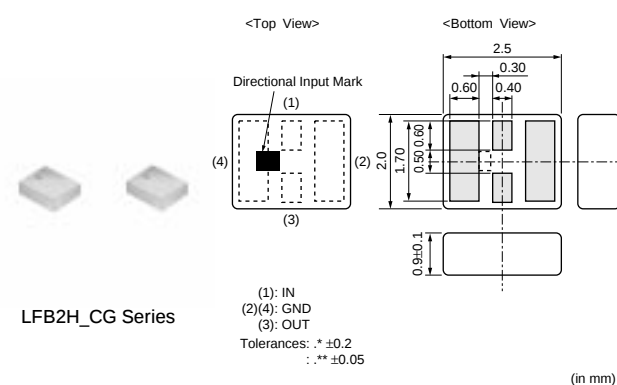


Frequency Characteristics

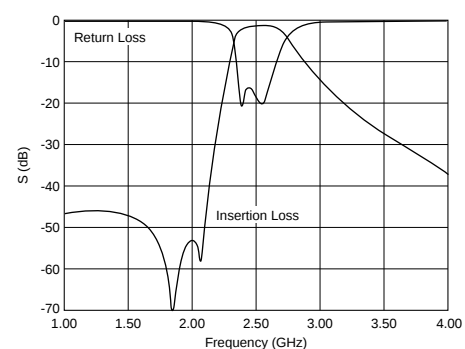


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB2H2G45CC1D005 | 2450.00                             | fo±50.00             | 1.60 max.<br>(at 25°C)    | 45 min.<br>at 746~960MHz             | 40 min.<br>at 1920~1990MHz            | WLAN/BT     |

## ● LFB2H(1008)\_CG Series

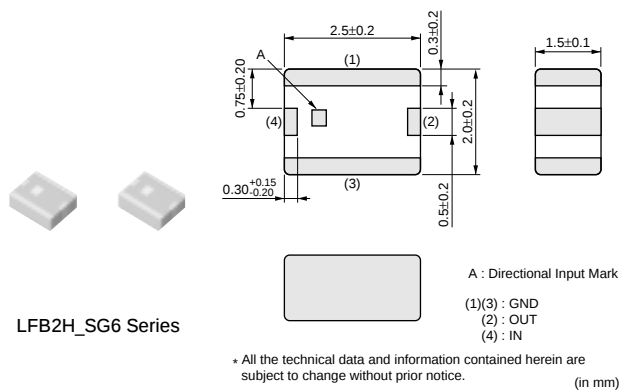


Frequency Characteristics

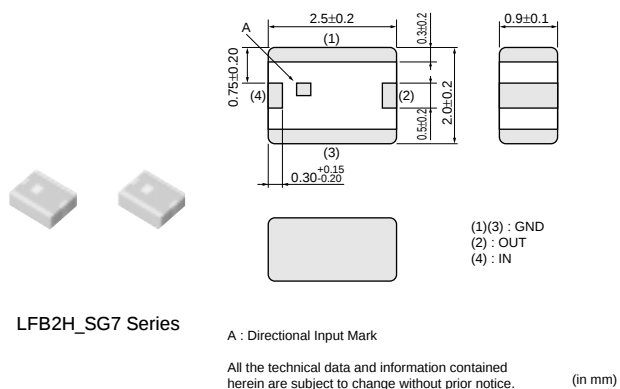
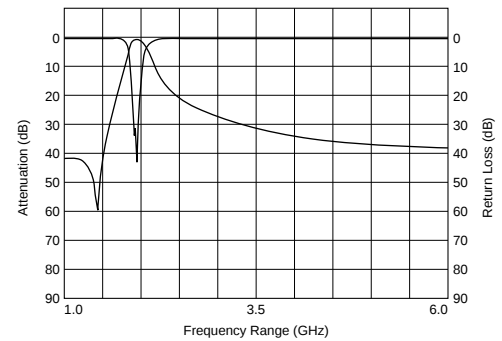


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB2H2G45CG1C026 | 2450.00                             | fo±50.00             | 2.10 max.<br>(at 25°C)    | 43 min.<br>at 806~849MHz             | 43 min.<br>at 1920~1990MHz            | WLAN/BT     |

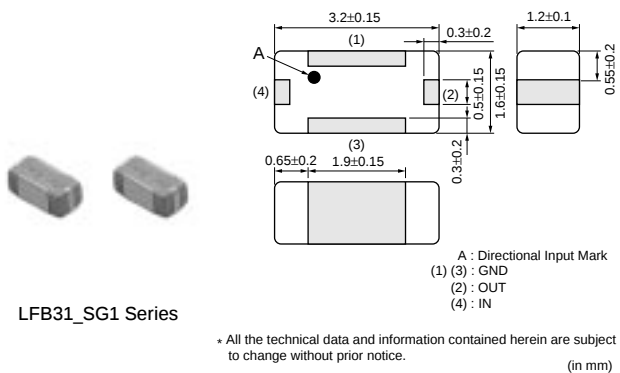
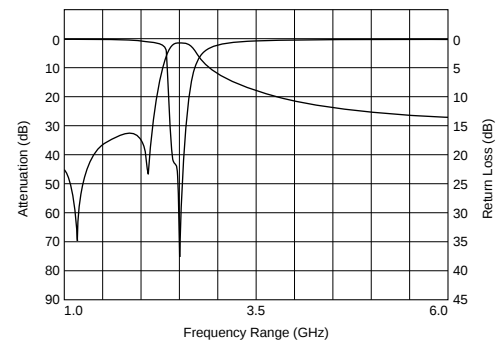
## ● LFB2H(1008)\_SG/LFB31(1206)\_SG Series



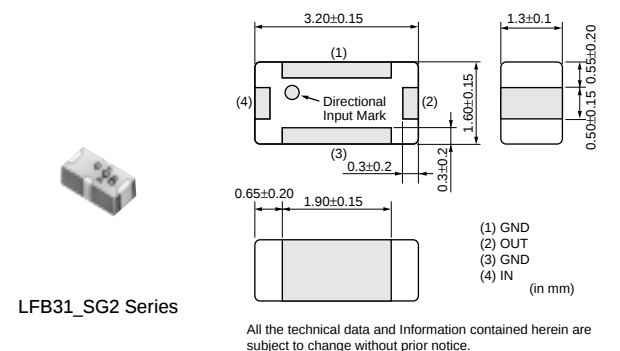
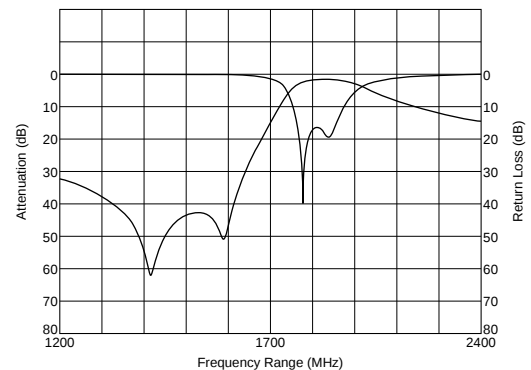
### Frequency Characteristics



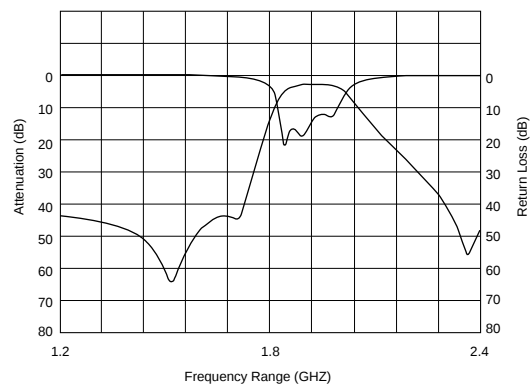
### The Characteristics of Spurious



### Frequency Characteristics



### Frequency Characteristics

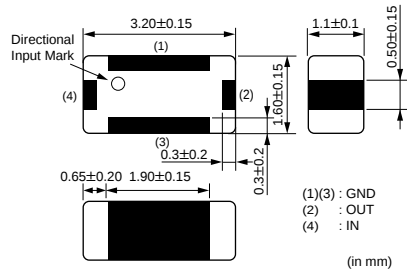


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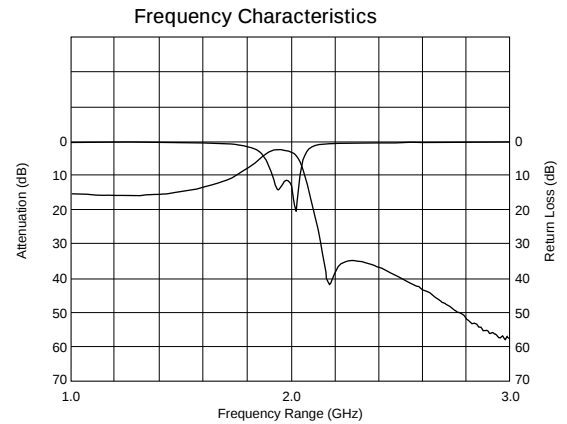
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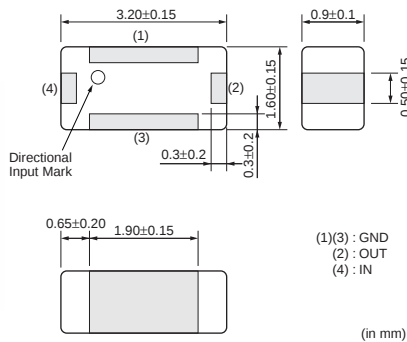
**LFB31\_SG3 Series**



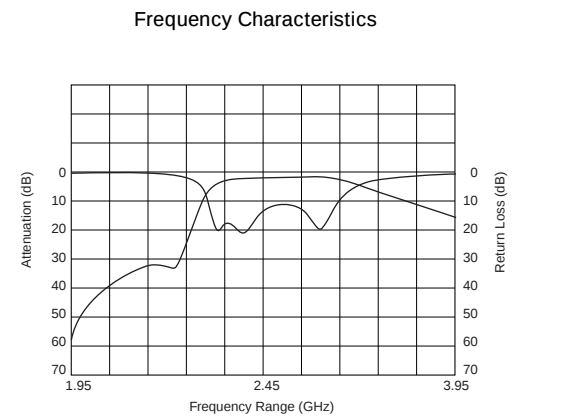
All the technical and Information contained herein are subject to change without prior notice.



**LFB31\_SG7 Series**



All the technical data and information contained herein are subject to change without prior notice.



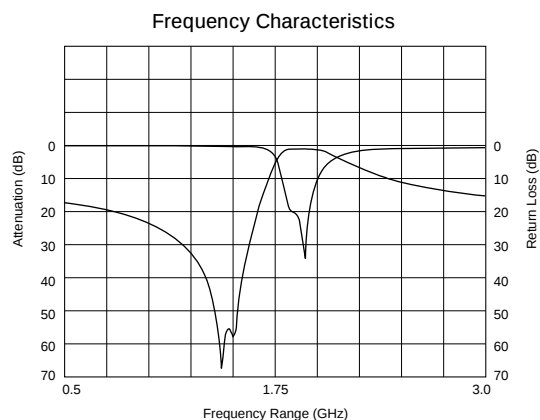
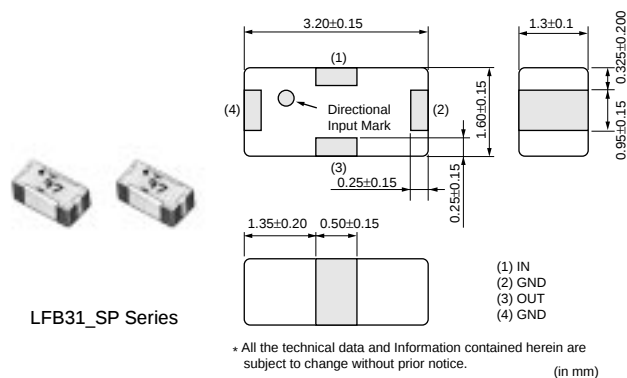
| Part Number             | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application     |
|-------------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-----------------|
| <b>LFB2H1G90SG6A157</b> | 1906.5                              | fo±13.5              | 1.5 max.<br>(at 25°C)     | 14 min.<br>at 1687MHz                | 6 min.<br>at 2126MHz                  | PHS             |
| <b>LFB2H2G45SG7A134</b> | 2450                                | fo±50                | 1.7 max.<br>(at 25°C)     | 25 min.<br>at 1750MHz                | 25 min.<br>at 2100MHz                 | WLAN/BT         |
| <b>LFB2H2G45SG7A158</b> | 2450                                | fo±50                | 1.2 max.<br>(at 25°C)     | 30 min.<br>at 880~915MHz             | 30 min.<br>at 1710~1785MHz            | WLAN/BT         |
| <b>LFB2H2G45SG7A159</b> | 2450                                | fo±50                | 2.1 max.<br>(at 25°C)     | 45 min.<br>at 880~915MHz             | 48 min.<br>at 1710~1990MHz            | WLAN/BT         |
| <b>LFB2H2G45SG7B793</b> | 2450                                | fo±50                | 3.5 max.<br>(at 25°C)     | 42 min.<br>at 869~915MHz             | 45 min.<br>at 1710~1785MHz            | WLAN/BT         |
| <b>LFB2H2G45SG7C093</b> | 2450                                | fo±50                | 2.1 max.<br>(at 25°C)     | 45 min.<br>at 824~915MHz             | 48 min.<br>at 1710~1990MHz            | WLAN/BT         |
| <b>LFB2H2G45SGDB865</b> | 2450                                | fo±50                | 3.4 max.<br>(at 25°C)     | 45 min.<br>at 880~915MHz             | 40 min.<br>at 1710~1785MHz            | WLAN/BT         |
| <b>LFB2H2G45SGFB914</b> | 2450                                | fo±50                | 2.3 max.<br>(at 25°C)     | 44 min.<br>at 824~960MHz             | 40 min.<br>at 1710~1785MHz            | WLAN/BT         |
| <b>LFB2H2G54SG7B881</b> | 2545                                | fo±145               | 2 max.<br>(at 25°C)       | 39.5 min.<br>at 1910MHz              | 39.5 min.<br>at 1990MHz               | WIMAX           |
| <b>LFB2H2G59SG7B858</b> | 2590                                | fo±100               | 2.1 max.<br>(at 25°C)     | 40 min.<br>at 824~915MHz             | 30 min.<br>at 2110~2170MHz            | WIMAX           |
| <b>LFB2H5G78SG7A175</b> | 5787.5                              | fo±62.5              | 2.5 max.<br>(at 25°C)     | 51.5 min.<br>at 902~928MHz           | 41 min.<br>at 3919~4044MHz            | WLAN/BT         |
| <b>LFB311G90SG1-799</b> | 1906.5                              | fo +24.5/-13.5MHz    | 2.5 max.<br>(at 25°C)     | 40 min.<br>at 1397.05~1422.85MHz     | 35 min.<br>at 1645.5~1671.3MHz        | PHS             |
| <b>LFB311G90SG2-797</b> | 1906.5                              | fo±13.5              | 2.7 max.<br>(at 25°C)     | 40 min.<br>at 1427~1454MHz           | 35 min.<br>at 1660~1687MHz            | PHS             |
| <b>LFB311G95SG3A564</b> | 1950                                | fo±30                | 3.5 max.<br>(at 25°C)     | 20 min.<br>at 2110~2170MHz           | 25 min.<br>at 2490~2550MHz            | UMTS<br>(Band1) |

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| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB312G45SG2A509 | 2450                                | fo±50                | 2 max.<br>(at 25°C)       | 38 min.<br>at 902~928MHz             | 15 min.<br>at 2100~2200MHz            | WLAN/BT     |
| LFB312G45SG7A572 | 2450                                | fo±50                | 2.5 max.<br>(at 25°C)     | 37 min.<br>at 902~928MHz             | 20 min.<br>at 2100~2200MHz            | WLAN/BT     |

## ● LFB31\_SP Series (1206)

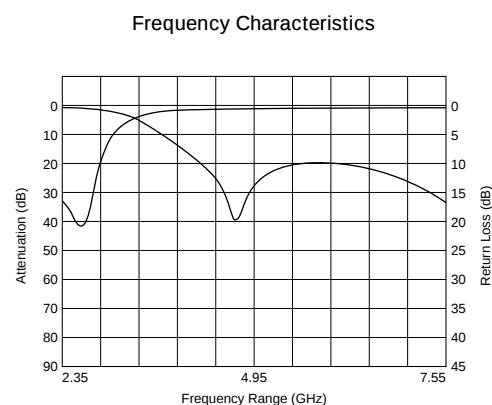
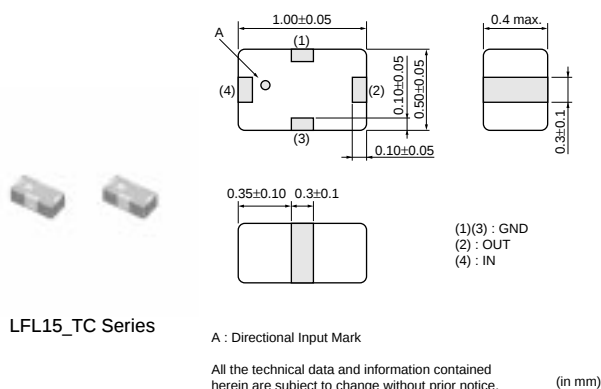


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB311G90SP1-798 | 1906.5                              | fo±13.5              | 1.0 max.<br>(at 25°C)     | 40.0 min.<br>at 1405~1440MHz         | 12.0 min.<br>at 1649~1680MHz          | PHS         |
| LFB312G45SP1A502 | 2450                                | fo±50                | 1.2 max.<br>(at 25°C)     | 20 min.<br>at 902~928MHz             | 35 min.<br>at 1500~1550MHz            | WLAN/BT     |

## for RF/Local

### Chip Multilayer LC Filters (LPF)

## ● LFL15\_TC (0402) /LFL18\_TC (0603) Series

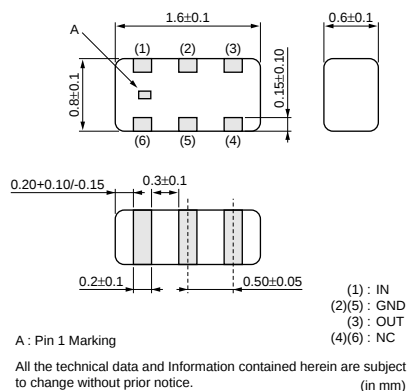


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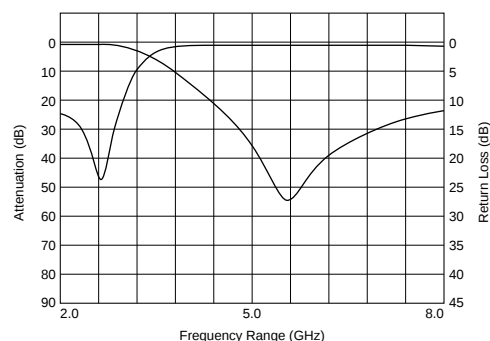
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LFL18\_TC1 Series



Frequency Characteristics

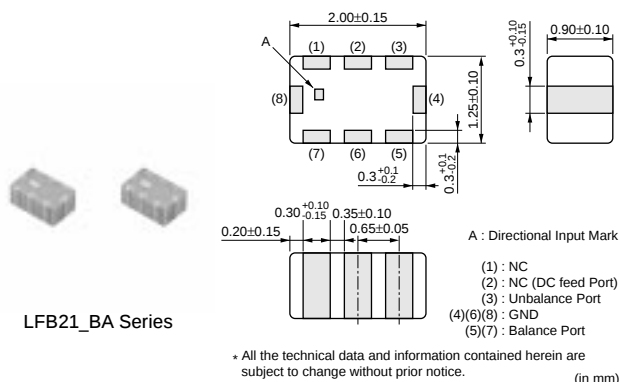


| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application               |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|---------------------------|
| LFL15620MTC1C037 | 620                                 | fo±150               | 0.4 max.<br>(at 25°C)     | 28 min.<br>at 1920~1980MHz           | -                                     | CDMA                      |
| LFL15869MTC1B787 | 869.5                               | fo±45.5              | 0.50 max.<br>(at 25°C)    | 18 min.<br>at 2x(fo±45.5)MHz         | 17 min.<br>at 3x(fo±45.5)MHz          | GSM850/900                |
| LFL151G81TC1B786 | 1810                                | fo±100               | 0.60 max.<br>(at 25°C)    | 23 min.<br>at 3420~3570MHz           | 21 min.<br>at 3700~3820MHz            | GSM1800/1900              |
| LFL151G95TC1C157 | 2017.5                              | fo±20                | 0.50 max.<br>(at 25°C)    | 24 min.<br>at 2xf1 MHz               | 16 min.<br>at 3xf1 MHz                | TD-SCDMA                  |
| LFL152G45TC1A219 | 2450                                | fo±50                | 0.45 max.<br>(at 25°C)    | 21 min.<br>at 2x(fo±50.0)MHz         | 21 min.<br>at 3x(fo±50.0)MHz          | WLAN/BT                   |
| LFL18620MTC2C181 | 620.00                              | fo±150.00            | 0.60 max.<br>(at 25°C)    | 26 min.<br>at 1429~1501MHz           | 26 min.<br>at 1565~1607MHz            | CDMA700                   |
| LFL18628MTC2C221 | 628.50                              | fo±158.50            | 0.65 max.<br>(at 25°C)    | 26 min.<br>at 1429~1501MHz           | 30 min.<br>at 1565~1607MHz            | UMTS<br>(Band12/13/14/17) |
| LFL182G45TC1A108 | 2450                                | fo±50                | 0.37 max.<br>(at 25°C)    | 27 min.<br>at 4800~5000MHz           | 25 min.<br>at 7200~7500MHz            | WLAN/BT                   |
| LFL182G45TC1A202 | 2450                                | fo±50                | 0.40 max.<br>(at 25°C)    | 27 min.<br>at 4800~5000MHz           | 30 min.<br>at 7200~7500MHz            | WLAN/BT                   |
| LFL182G45TC3B746 | 2450                                | fo±50                | 0.60 max.<br>(at 25°C)    | 35 min.<br>at 2x(fo±50)MHz           | 30 min.<br>at 3x(fo±50)MHz            | WLAN/BT                   |
| LFL182G50TC1B905 | 2500                                | fo±200               | 0.4 max.<br>(at 25°C)     | 21 min.<br>at 4600~5400MHz           | 22 min.<br>at 6900~8100MHz            | WIMAX                     |
| LFL182G54TC1B838 | 2545                                | fo±145               | 0.4 max.<br>(at 25°C)     | 26 min.<br>at 4800~5390MHz           | 23 min.<br>at 7200~8085MHz            | WIMAX                     |
| LFL183G55TC2B908 | 3550                                | fo±250               | 0.45 max.<br>(at 25°C)    | 17 min.<br>at 6600~7600MHz           | 20 min.<br>at 9900~11400MHz           | WIMAX                     |
| LFL183G55TC3C218 | 3550.00                             | fo±250.00            | 0.55 max.<br>(at 25°C)    | 35 min.<br>at 6600~7600MHz           | 34 min.<br>at 9900~11400MHz           | WIMAX                     |



# for RF/Local

## Chip Multilayer LC Filters (Balanced Filters)



| Part Number      | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Balance Impedance (Differential) (Nom.) (ohm)     | Unbalance Impedance (Nom.) (ohm) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|---------------------------------------------------|----------------------------------|-------------|
| LFB212G44BB1C141 | 2441                                | fo±39                | 3.00 max.<br>(at 25°C)    | Conjugate match<br>to CSR BC5-MM                  | 50                               | WLAN/BT     |
| LFB212G44BF5D107 | 2441                                | fo±39                | 3.30 max.<br>(at 25°C)    | Conjugate match<br>to ST Micro STLC2584           | 50                               | WLAN/BT     |
| LFB212G45BA1A220 | 2450.00                             | fo±50.00             | 3.5 max.<br>(at 25°C)     | 34.2 -j95.0ohm (Differential)<br>Source Impedance | 50                               | WLAN/BT     |
| LFB212G45BA1A234 | 2450.00                             | fo±50.00             | 3.5 max.<br>(at 25°C)     | 50                                                | 50                               | WLAN/BT     |
| LFB212G45BA1B759 | 2450.00                             | fo±50.00             | 3.5 max.<br>(at 25°C)     | 100                                               | 50                               | WLAN/BT     |
| LFB212G45BA1B763 | 2450.00                             | fo±50.00             | 3.5 max.<br>(at 25°C)     | 50 +j50ohm (Differential)<br>Source Impedance     | 50                               | WLAN/BT     |
| LFB212G45BA1C057 | 2450                                | fo±50                | 2.8 max.<br>(at 25°C)     | Conjugate match<br>to CSR BC4-ROM                 | 50                               | WLAN/BT     |
| LFB212G45BA1C155 | 2450                                | fo±50                | 2.80 max.<br>(at 25°C)    | Conjugate match<br>to CSR BC4-ROM                 | 50                               | WLAN/BT     |
| LFB212G45BA4D007 | 2450                                | fo±50                | 3.30 max.<br>(at 25°C)    | Conjugate match<br>to TI BRF6300/6350             | 50                               | WLAN/BT     |
| LFB212G45BAAD023 | 2450                                | fo±50                | 3.10 max.<br>(at 25°C)    | Conjugate match<br>to Mediatek MT6611             | 50                               | WLAN/BT     |
| LFB212G45BAAD071 | 2450                                | fo±50                | 3.50 max.<br>(at 25°C)    | Conjugate match<br>to CSR BC6-ROM                 | 50                               | WLAN/BT     |
| LFB212G45BAAD084 | 2450.00                             | fo±50.00             | 2.8 max.<br>(at 25°C)     | Conjugate match<br>to MTK MT6611                  | 50                               | WLAN/BT     |
| LFB212G45BB1D126 | 2450.00                             | fo±50.00             | 2.8 max.<br>(at 25°C)     | Conjugate match<br>to MTK MT6612/6616             | 50                               | WLAN/BT     |
| LFB213G55BA1B974 | 3550                                | fo±250               | 3.2 max.<br>(at 25°C)     | 100                                               | 50                               | WIMAX       |
| LFB215G37BA1A233 | 5375.00                             | fo±475.00            | 2.8 max.<br>(at 25°C)     | 100                                               | 50                               | WLAN/BT     |
| LFB2H2G44BB5B754 | 2441.75                             | fo±41.75             | 3.3 max.<br>(at 25°C)     | 120                                               | 50                               | WLAN/BT     |
| LFB2H2G45BB1A221 | 2450                                | fo±50                | 3.0 max.<br>(at 25°C)     | 75                                                | 50                               | WLAN/BT     |
| LFB2H2G45BB1A243 | 2450                                | fo±50                | 3.0 max.<br>(at 25°C)     | 100                                               | 50                               | WLAN/BT     |
| LFB2H2G60BB1B973 | 2600                                | fo±100               | 3.3 max.<br>(at 25°C)     | 100                                               | 50                               | WIMAX       |
| LFB2H2G60BB1C106 | 2600                                | fo±100               | 3.3 max.<br>(at 25°C)     | 50                                                | 50                               | WIMAX       |