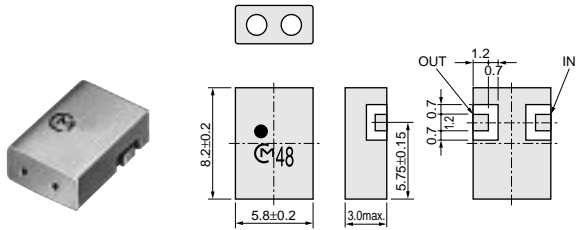


for RF/Local

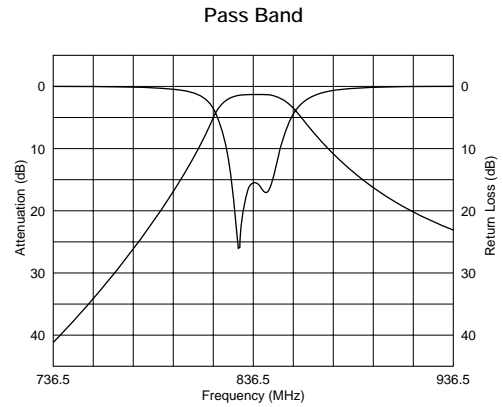
Dielectric Filters (GIGAFIL®)

● DFCB Series 800/900MHz



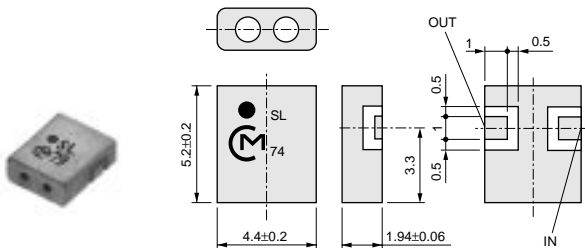
DFCB2836MLDJAA

Tolerances unless otherwise specified: ±0.1 (in mm)



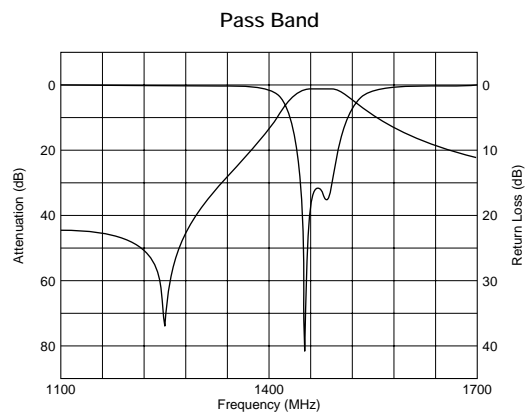
| Part Number | Center Frequency (MHz) | Bandwidth (MHz) | IL at BW (max.) (dB) | Attenuation (dB min.) | Operation Temperature Range |
|----------------|------------------------|-----------------|----------------------|-----------------------|-----------------------------|
| DFCB2836MLDJAA | 836.5 | 25 | 2.6 | 6.5 (869 to 894MHz) | -35 to +85degree C |
| DFCB2881MLDJAA | 881.5 | 25 | 2.6 | 9 (824 to 849MHz) | -35 to +85degree C |
| DFCB2902MLDJAA | 902.5 | 25 | 2.6 | 27 (Fo-77.5MHz) | -35 to +85degree C |
| DFCB2915MLDJAA | 915 | 26 | 2.5 | 27 (837.5MHz) | -35 to +85degree C |
| DFCB2947MLDJAA | 947.5 | 25 | 2.6 | 27 (Fo-77.5MHz) | -35 to +85degree C |
| DFCB3815MLDJAA | 815.5 | 19 | 2.5 | 12 (Fo±35.5MHz) | -35 to +85degree C |
| DFCB3836MLDJAA | 836.5 | 25 | 3.0 | 12 (869 to 894MHz) | -35 to +85degree C |
| DFCB3860MLDJAA | 860.5 | 19 | 2.5 | 13 (Fo-35.5MHz) | -35 to +85degree C |
| DFCB3881MLDJAA | 881.5 | 25 | 3.0 | 15 (824 to 849MHz) | -35 to +85degree C |
| DFCB3902MLDJAA | 902.5 | 25 | 3.0 | 45 (Fo-77.5MHz) | -35 to +85degree C |
| DFCB3915MLDJAA | 915 | 26 | 3.0 | 15 (Fo-32.5MHz) | -35 to +85degree C |
| DFCB3947MLDJAA | 947.5 | 25 | 3.0 | 45 (Fo-77.5MHz) | -35 to +85degree C |

● DFCB Series 1.5-5GHz



DFCB21G47LBJAA

Tolerances unless otherwise specified: ±0.1 (in mm)

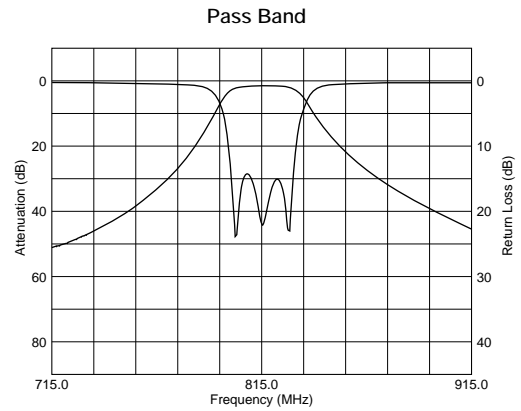
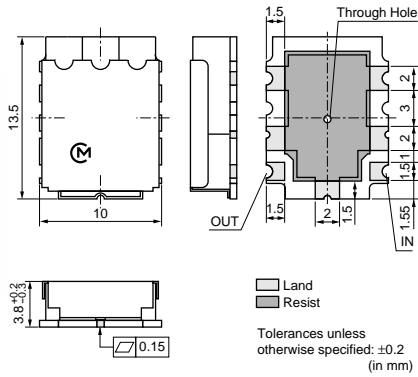


| Part Number | Center Frequency (MHz) | Bandwidth (MHz) | IL at BW (max.) (dB) | Attenuation (dB min.) | Operation Temperature Range |
|----------------|------------------------|-----------------|----------------------|-----------------------|-----------------------------|
| DFCB21G47LBJAA | 1472 | 40 | 2.0 | 38 (1122MHz) | -40 to +85degree C |
| DFCB21G57LBJAB | 1575.42 | 3 | 1.3 | 37 (1850 to 1910MHz) | -35 to +85degree C |
| DFCL21G57LBJAE | 1575.42 | 2.046 | 3.9 | 30 (1475.42MHz) | -35 to +85degree C |
| DFCB21G57LCJAA | 1575.42 | 2 | 3.5 | 15 (Fo±50MHz) | -40 to +85degree C |
| DFCB21G57LDJAB | 1575.42 | 2 | 3.15 | 18 (Fo±50MHz) | -35 to +85degree C |
| DFCB21G84LDJAA | 1842.5 | 75 | 2.0 | 20 (Fo-160MHz) | -35 to +85degree C |
| DFCB21G89LBJAA | 1890 | 20 | 2.0 | 40 (1660 to 1680MHz) | -35 to +85degree C |
| DFCB21G89LDJAA | 1890 | 20 | 2.0 | 45 (1660 to 1680MHz) | -40 to +85degree C |
| DFCB21G92LDJAA | 1920 | 20 | 1.9 | 16 (1800 to 1820MHz) | -40 to +85degree C |
| DFCB21G96LDJAA | 1960 | 60 | 1.5 | 17 (2360MHz) | -35 to +85degree C |
| DFCB22G32LBJAA | 2326 | 14 | 1.8 | 8.5 (2227MHz) | -35 to +85degree C |
| DFCL22G33LANAC | 2339 | 14 | 2.0 | 22 (0.3 to 2188MHz) | -40 to +125degree C |
| DFCB22G34LBJAA | 2345 | 80 | 2.5 | 20 (350 to 1200MHz) | -35 to +85degree C |
| DFCB22G44LBJAA | 2442 | 84 | 2.0 | 16 (Fo-250MHz) | -40 to +85degree C |
| DFCB22G45LBJAA | 2450 | 100 | 2.0 | 15 (Fo-250MHz) | -40 to +85degree C |
| DFCB25G25LAHAA | 5250 | 200 | 1.5 | 38 (4370 to 4510MHz) | -35 to +85degree C |
| DFCB25G59LAHAA | 5597.5 | 255 | 1.5 | 11 (Fo-375MHz) | -35 to +85degree C |
| DFCB25G77LAHAA | 5775 | 100 | 1.5 | 12 (Fo-375MHz) | -35 to +85degree C |
| DFCB31G47LBJAA | 1472 | 40 | 3.0 | 45 (1100MHz) | -35 to +85degree C |
| DFCB31G74LBJAA | 1747.5 | 75 | 3.5 | 45 (1464 to 1539MHz) | -35 to +85degree C |
| DFCB31G84LBJAA | 1842.5 | 75 | 3.5 | 45 (1559 to 1634MHz) | -35 to +85degree C |
| DFCB31G84LBJAB | 1842.5 | 75 | 2.75 | 45 (0.3 to 1500MHz) | -35 to +85degree C |
| DFCB31G88LBJAA | 1880 | 60 | 3.7 | 43 (1640 to 1664MHz) | -35 to +85degree C |
| DFCB31G88LBJAB | 1880 | 60 | 4.0 | 41 (2043 to 2103MHz) | -35 to +85degree C |
| DFCB31G95LBJAA | 1950 | 60 | 3.5 | 35 (2110 to 2170MHz) | -35 to +85degree C |
| DFCB31G96LBJAA | 1960 | 60 | 3.7 | 5 (1910MHz) | -35 to +85degree C |
| DFCB31G96LBJAB | 1960 | 60 | 3.0 | 10 (1498 to 1860MHz) | -35 to +85degree C |
| DFCB32G14LBJAA | 2140 | 60 | 3.7 | 30 (1920 to 1980MHz) | -35 to +85degree C |
| DFCB32G32LBJAA | 2326 | 14 | 3.0 | 24 (2227MHz) | -35 to +85degree C |
| DFCL32G33LANAA | 2339 | 14 | 3.0 | 39 (0.3 to 2188MHz) | -40 to +125degree C |
| DFCL32G35LBNA | 2350 | 100 | 2.0 | 40(1850to1980MHz) | -35 to +85degree C |
| DFCB32G44LBJAA | 2442 | 84 | 3.2 | 30 (Fo-250MHz) | -40 to +85degree C |
| DFCB32G45LBJAA | 2450 | 100 | 3.2 | 30 (Fo-250MHz) | -40 to +85degree C |
| DFCB32G59LBHAA | 2595 | 190 | 2.0 | 40 (1930 to 2170MHz) | -35 to +85degree C |
| DFCB32G59LBHAB | 2595 | 190 | 1.5 | 35 (1930 to 2170MHz) | -35 to +85degree C |
| DFCL32G59LBNA | 2593 | 194 | 2.0 | 40(1930to2170MHz) | -35 to +85degree C |
| DFCL33G40LCHAA | 3400 | 200 | 2.0 | 38 (3050MHz) | -35 to +85degree C |
| DFCL33G40LCHAB | 3400 | 200 | 1.3 | 30 (3050MHz) | -35 to +85degree C |
| DFCL33G50LBHAA | 3500 | 200 | 2.0 | 40(3150MHz) | -35 to +85degree C |
| DFCL33G50LCHAA | 3500 | 200 | 2.0 | 38 (3150MHz) | -35 to +85degree C |
| DFCL33G50LCHAB | 3500 | 200 | 1.3 | 30 (3150MHz) | -35 to +85degree C |
| DFCL33G55LCHAB | 3550 | 300 | 3.0 | 40 (450MHz) | -35 to +85degree C |
| DFCL33G60LCHAA | 3600 | 200 | 2.0 | 38 (3250MHz) | -35 to +85degree C |
| DFCL33G60LCHAB | 3600 | 200 | 1.3 | 30 (3250MHz) | -35 to +85degree C |
| DFCL33G70LCHAA | 3700 | 200 | 2.0 | 38 (3350MHz) | -35 to +85degree C |
| DFCL33G70LCHAB | 3700 | 200 | 1.3 | 30 (3350MHz) | -35 to +85degree C |
| DFCB35G25LAHAA | 5250 | 200 | 3.3 | 45 (4450 to 4650MHz) | -35 to +85degree C |
| DFCB35G59LAHAA | 5597.5 | 255 | 3.6 | 45 (4750 to 5000MHz) | -35 to +85degree C |
| DFCB35G77LAHAA | 5775 | 100 | 3.0 | 30 (Fo-375MHz) | -35 to +85degree C |

● DFCH Series 800/900MHz



DFCH3815MHDJAA



| Part Number | Center Frequency (MHz) | Bandwidth (MHz) | IL at BW (max.) (dB) | Attenuation (dB min.) | Operation Temperature Range |
|----------------|------------------------|-----------------|----------------------|-----------------------|-----------------------------|
| DFCH3815MHDJAA | 815 | 20 | 2.8 | 36 (Fo±80MHz) | -35 to +85degree C |
| DFCH3836MHDJAA | 836.5 | 25 | 2.6 | 12 (Fo±32.5MHz) | -35 to +85degree C |
| DFCH3860MHDJAA | 860 | 20 | 2.8 | 36 (Fo±80MHz) | -35 to +85degree C |
| DFCH3881MHDJAA | 881.5 | 25 | 2.6 | 12 (Fo±32.5MHz) | -35 to +85degree C |
| DFCH3897MHDJAA | 897.5 | 35 | 3.0 | 6 (Fo±27.5MHz) | -35 to +85degree C |
| DFCH3902MHDJAA | 902.5 | 25 | 2.6 | 12 (Fo±32.5MHz) | -35 to +85degree C |
| DFCH3942MHDJAA | 942.5 | 35 | 3.0 | 6 (Fo±27.5MHz) | -35 to +85degree C |
| DFCH3947MHDJAA | 947.5 | 25 | 2.6 | 12 (Fo±32.5MHz) | -35 to +85degree C |
| DFCH4836MHDJBA | 836.5 | 25 | 2.4 | 23 (1 to 804MHz) | -35 to +85degree C |
| DFCH4897MHDJAA | 897.5 | 35 | 4.6 | 13 (Fo±27.5MHz) | -35 to +85degree C |
| DFCH4942MHDJAA | 942.5 | 35 | 4.6 | 13 (Fo±27.5MHz) | -35 to +85degree C |
| DFCH5897MHDJAB | 897.5 | 35 | 3.5 | 40 (1 to 500MHz) | -35 to +85degree C |

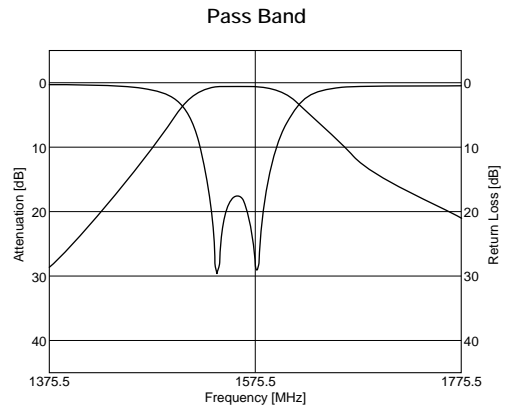
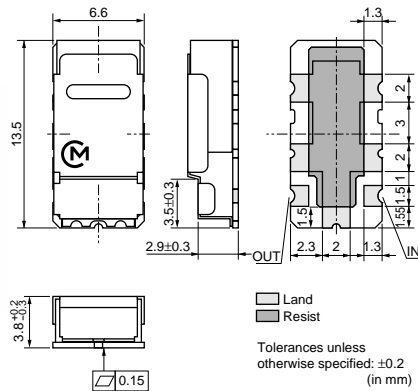
7

Filters for Communication Equipment

● DFCH Series 1.5-2.5GHz



DFCH21G57HDHAA



| Part Number | Center Frequency (MHz) | Bandwidth (MHz) | IL at BW (max.) (dB) | Attenuation (dB min.) | Operation Temperature Range |
|----------------|------------------------|-----------------|----------------------|--------------------------|-----------------------------|
| DFCH21G57HDHAA | 1575.5 | 2 | 0.9 | 16 (Fo-140MHz) | -35 to +85degree C |
| DFCH22G01HDJAA | 2017.5 | 15 | 1.8 | 22 (1899 to 1915MHz) | -40 to +85degree C |
| DFCH22G44HDHAA | 2442 | 84 | 1.2 | 15 (Fo±250MHz) | -35 to +85degree C |
| DFCH22G45HDHAA | 2450 | 100 | 1.0 | 16 (Fo-250MHz) | -35 to +85degree C |
| DFCH31G54HDJAA | 1542 | 34 | 3.0 | 30 (1626.5 to 1660.5MHz) | -35 to +85degree C |
| DFCH31G64HDJAA | 1643.5 | 34 | 3.0 | 30 (1525 to 1559MHz) | -35 to +85degree C |
| DFCH31G74HDJAA | 1747.5 | 75 | 2.0 | 8 (Fo±80MHz) | -35 to +85degree C |
| DFCH31G84HDJAA | 1842.5 | 75 | 2.0 | 8 (Fo±80MHz) | -35 to +85degree C |
| DFCH31G88HDJAA | 1880 | 60 | 2.2 | 15 (Fo±100MHz) | -35 to +85degree C |
| DFCH31G95HDHAA | 1950 | 60 | 1.8 | 45 (1550MHz) | -35 to +85degree C |
| DFCH31G96HDJAA | 1960 | 60 | 2.2 | 15 (Fo±100MHz) | -35 to +85degree C |
| DFCH32G01HDNAA | 2017.5 | 15 | 3.0 | 38 (1920MHz) | -35 to +85degree C |

Continued on the following page.

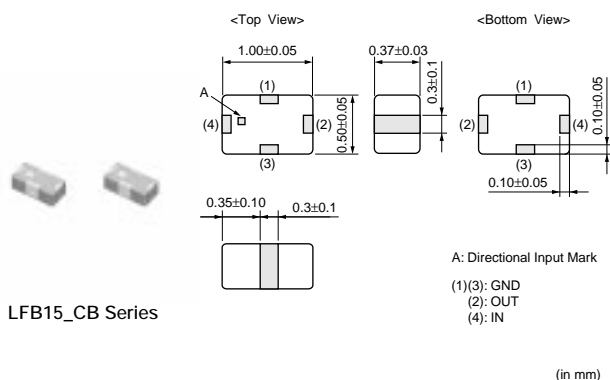
Continued from the preceding page.

| Part Number | Center Frequency (MHz) | Bandwidth (MHz) | IL at BW (max.) (dB) | Attenuation (dB min.) | Operation Temperature Range |
|----------------|------------------------|-----------------|----------------------|-----------------------|-----------------------------|
| DFCH32G14HDHAA | 2140 | 60 | 1.3 | 52 (1325 to 1385MHz) | -35 to +85degree C |
| DFCH32G44HDHAA | 2442 | 84 | 2.4 | 36 (Fo-250MHz) | -35 to +85degree C |
| DFCH32G45HDHAA | 2450 | 100 | 2.3 | 36 (Fo-250MHz) | -35 to +85degree C |
| DFCH32G59HDHBA | 2593 | 186 | 1.0 | 30 (1930 to 1990MHz) | -35 to +85degree C |
| DFCH41G74HDJAA | 1747.5 | 75 | 3.6 | 10 (Fo±57.5MHz) | -35 to +85degree C |
| DFCH41G84HDJAA | 1842.5 | 75 | 3.6 | 10 (Fo±57.5MHz) | -35 to +85degree C |
| DFCH41G88HDJAA | 1880 | 60 | 4.5 | 12 (Fo±50MHz) | -35 to +85degree C |
| DFCH41G96HDJAA | 1960 | 60 | 4.5 | 12 (Fo±50MHz) | -35 to +85degree C |
| DFCH51G73HDNBA | 1732.5 | 45 | 3.7 | 44 (1 to 1413MHz) | -35 to +85degree C |
| DFCH51G76HDNBA | 1760 | 50 | 3.9 | 58 (1 to 1443MHz) | -35 to +85degree C |
| DFCH51G88HDNAA | 1880 | 60 | 3.8 | 45 (1 to 1568MHz) | -35 to +85degree C |
| DFCH51G95HDNBA | 1950 | 60 | 3.7 | 45 (1 to 1638MHz) | -35 to +85degree C |

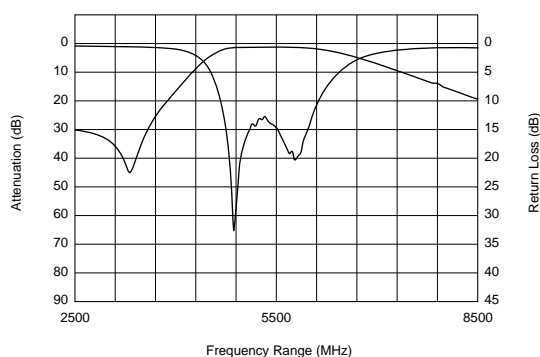
for RF/Local

Chip Multilayer LC Filters (BPF)

● LFB15(0402)_CB Series

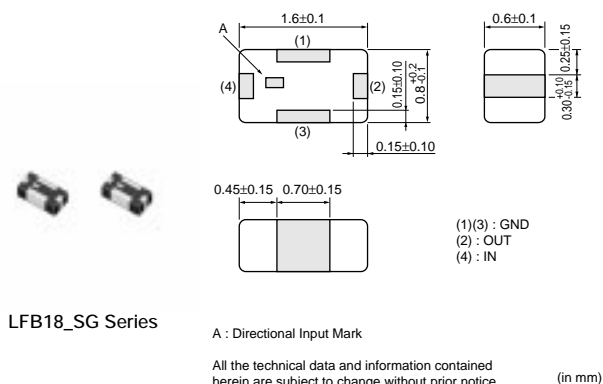


Frequency Characteristics

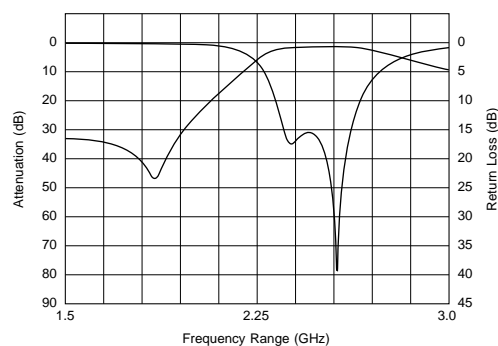


| Part Number | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| 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)/21(0805)/2H(1008)/31(1206)_SG Series



Frequency Characteristics

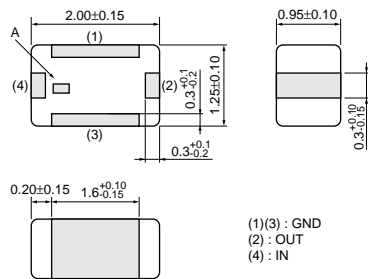


Continued on the following page. ↗

Continued from the preceding page.



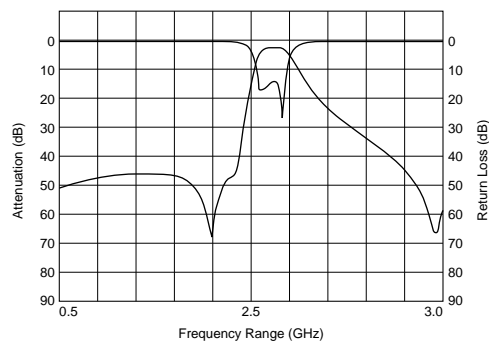
LFB21_SG Series



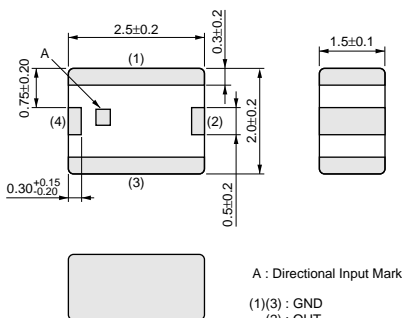
A : Directional Input Mark

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

Frequency Characteristics



LFB2H_SG6 Series

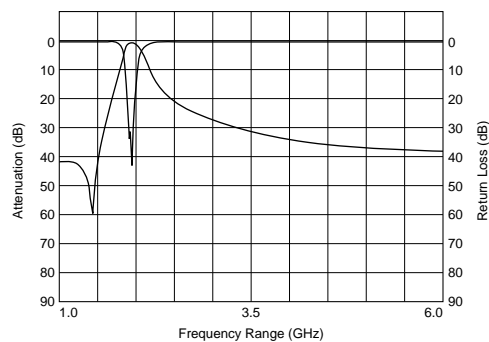


A : Directional Input Mark

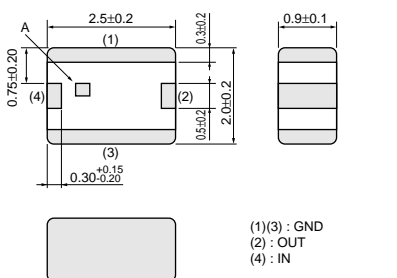
(1)(3) : GND
(2) : OUT
(4) : IN

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

Frequency Characteristics



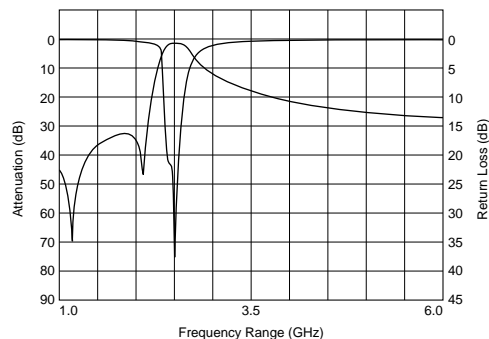
LFB2H_SG7 Series



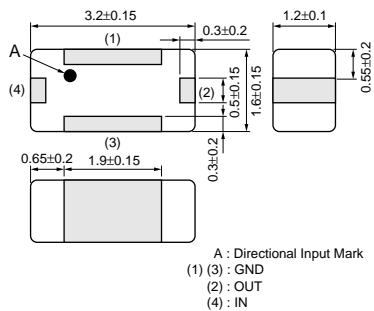
(1)(3) : GND
(2) : OUT
(4) : IN

A : Directional Input Mark
All the technical data and information contained herein are subject to change without prior notice. (in mm)

The Characteristics of Spurious



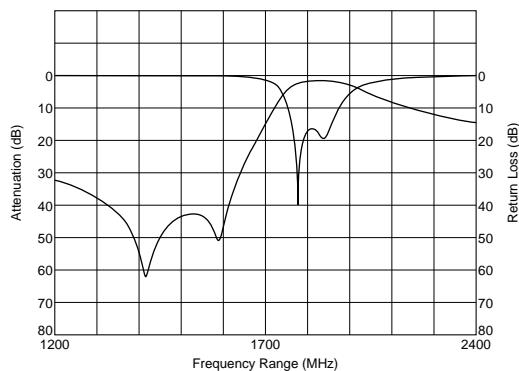
LFB31_SG1 Series



A : Directional Input Mark
(1) (3) : GND
(2) : OUT
(4) : IN

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

Frequency Characteristics

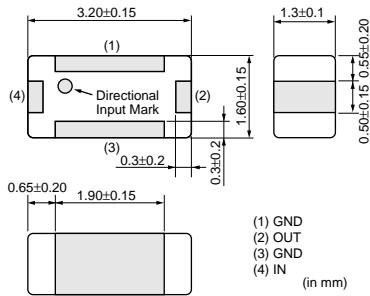


Continued on the following page.

Continued from the preceding page.

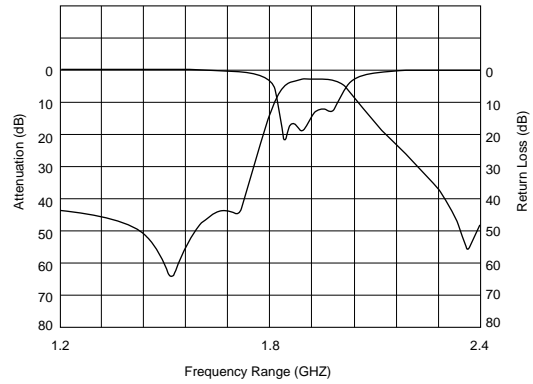


LFB31_SG2 Series

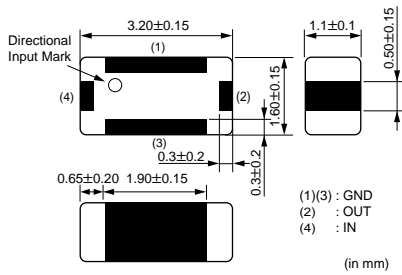


All the technical data and information contained herein are subject to change without prior notice.

Frequency Characteristics

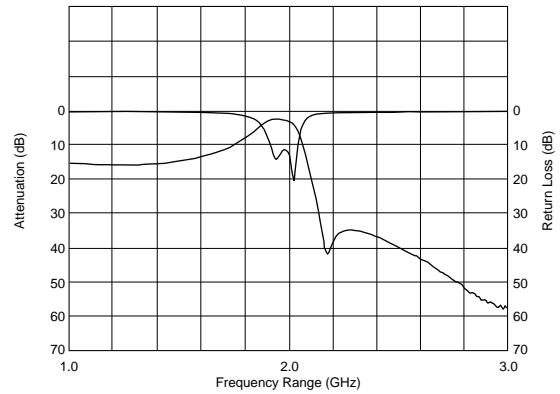


LFB31_SG3 Series

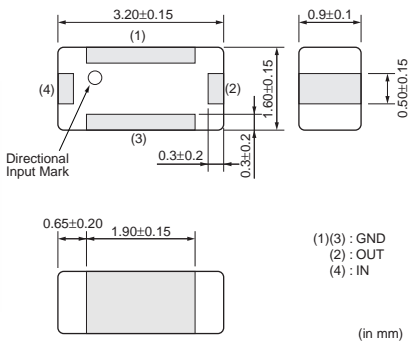


All the technical and information contained herein are subject to change without prior notice.

Frequency Characteristics

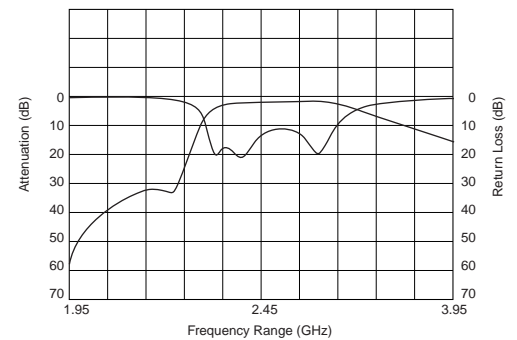


LFB31_SG7 Series



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

Frequency Characteristics



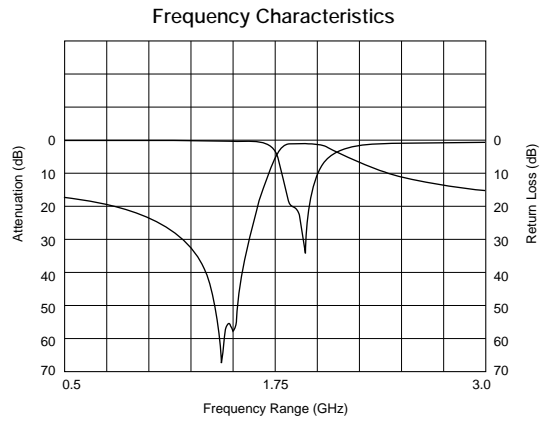
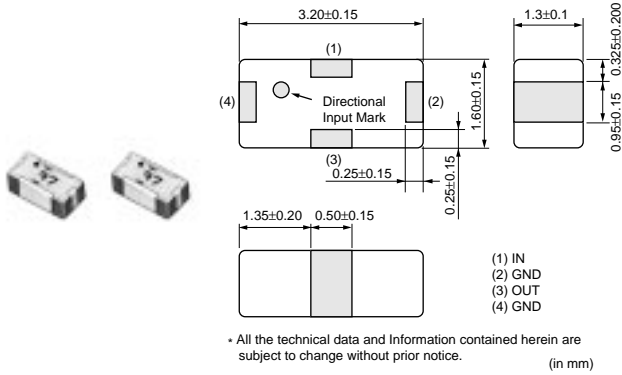
| Part Number | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| 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 |
| 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 |
| LFB211G90SG8B704 | 1906.5 | fo±13.5 | 3.0 max. (at 25°C) | 20 min. at 1660.5~1686.3MHz | 11 min. at 2126.8~2152.6MHz | PHS |
| LFB212G45SG8A127 | 2450 | fo±50 | 1.5 max. (at 25°C) | 25 min. at 1200~1300MHz | 10.0 min. at 2000MHz | WLAN/BT |
| LFB212G45SG8A143 | 2450 | fo±50 | 2.7 max. (at 25°C) | 20 min. at 880~1710MHz | 30 min. at 1710~1990MHz | WLAN/BT |

Continued on the following page.

Continued from the preceding page.

| 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 |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB212G45SG8A166 | 2450 | fo±50 | 1.4 max. (at 25°C) | 30 min. at 824-960MHz | 30 min. at 1710-1910MHz | WLAN/BT |
| LFB212G45SG8A192 | 2450 | fo±50 | 2.6 max. (at 25°C) | 40 min. at 880-960MHz | 38 min. at 1710-1990MHz | WLAN/BT |
| LFB212G49SG8B830 | 2495 | fo±195 | 2.4 max. (at 25°C) | 30 min. at 824-960MHz | 9 min. at 1710-1990MHz | WIMAX |
| LFB213G60SG8B831 | 3600 | fo±300 | 1.5 max. (at 25°C) | 32 min. at 824-960MHz | 24 min. at 1710-1990MHz | WIMAX |
| LFB215G12SG8A178 | 5125 | fo±225 | 1.5 max. (at 25°C) | 25 min. at 4200MHz | 17 min. at 2x(fo±225)MHz | WLAN/BT |
| LFB215G12SG8A183 | 5125 | fo±225 | 1.5 max. (at 25°C) | 9.0 min. at 4250MHz | 9.5 min. at 5900MHz | WLAN/BT |
| LFB215G25SG8A144 | 5250 | fo±100.0 | 1.5 max. (at 25°C) | 30 min. at 3450MHz | - | WLAN/BT |
| LFB215G37SG8A180 | 5375 | fo±475 | 1.8 max. (at 25°C) | 30 min. at 500-4000MHz | 35 min. at 3450MHz | WLAN/BT |
| LFB215G37SG8A185 | 5375 | fo±475 | 2.2 max. (at 25°C) | 40 min. at 340-1195MHz | 21 min. at 2140-3580MHz | WLAN/BT |
| LFB215G51SG8A132 | 5512 | fo±363 | 1.9 max. (at 25°C) | 30 min. at 500-4000MHz | 20 min. at 4600MHz | WLAN/BT |
| LFB215G78SG8A170 | 5787.5 | fo±62.5 | 2.2 max. (at 25°C) | 35 min. at 3275-3400MHz | 37 min. at 2x(fo±62.5)MHz | WLAN/BT |
| LFB2H1G90SG6A157 | 1906.5 | fo±13.5 | 1.5 max. (at 25°C) | 14 min. at 1687MHz | 6 min. at 2126MHz | PHS |
| LFB2H2G45SG7A134 | 2450 | fo±50 | 1.7 max. (at 25°C) | 25 min. at 1750MHz | 25 min. at 2100MHz | WLAN/BT |
| LFB2H2G45SG7A158 | 2450 | fo±50 | 1.2 max. (at 25°C) | 30 min. at 880-915MHz | 30 min. at 1710-1785MHz | WLAN/BT |
| LFB2H2G45SG7A159 | 2450 | fo±50 | 2.1 max. (at 25°C) | 45 min. at 880-915MHz | 48 min. at 1710-1990MHz | WLAN/BT |
| LFB2H2G45SG7B793 | 2450 | fo±50 | 3.5 max. (at 25°C) | 42 min. at 869-915MHz | 45 min. at 1710-1785MHz | WLAN/BT |
| LFB2H2G45SGDB865 | 2450 | fo±50 | 3.4 max. (at 25°C) | 45 min. at 880-915MHz | 40 min. at 1710-1785MHz | WLAN/BT |
| LFB2H2G45SGFB914 | 2450 | fo±50 | 2.3 max. (at 25°C) | 44 min. at 824-960MHz | 40 min. at 1710-1785MHz | WLAN/BT |
| LFB2H2G54SG7B881 | 2545 | fo±145 | 2 max. (at 25°C) | 39.5 min. at 1910MHz | 39.5 min. at 1990MHz | WIMAX |
| LFB2H2G59SG7B858 | 2590 | fo±100 | 2.1 max. (at 25°C) | 40 min. at 824-915MHz | 30 min. at 2110-2170MHz | WIMAX |
| LFB2H5G78SG7A175 | 5787.5 | fo±62.5 | 2.5 max. (at 25°C) | 51.5 min. at 902-928MHz | 41 min. at 3919-4044MHz | WLAN/BT |
| LFB311G90SG1-799 | 1906.5 | fo +24.5/-13.5MHz | 2.5 max. (at 25°C) | 40 min. at 1397.05-1422.85MHz | 35 min. at 1645.5-1671.3MHz | PHS |
| LFB311G90SG2-797 | 1906.5 | fo±13.5 | 2.7 max. (at 25°C) | 40 min. at 1427-1454MHz | 35 min. at 1660-1687MHz | PHS |
| LFB311G95SG3A564 | 1950 | fo±30 | 3.5 max. (at 25°C) | 20 min. at 2110-2170MHz | 25 min. at 2490-2550MHz | UMTS(Band1) |
| LFB312G45SG2A509 | 2450 | fo±50 | 2 max. (at 25°C) | 38 min. at 902-928MHz | 15 min. at 2100-2200MHz | WLAN/BT |
| LFB312G45SG7A572 | 2450 | fo±50 | 2.5 max. (at 25°C) | 37 min. at 902-928MHz | 20 min. at 2100-2200MHz | WLAN/BT |

● LFB31_SP Series (1206)

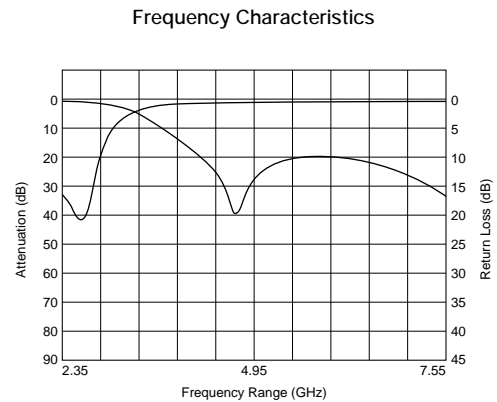
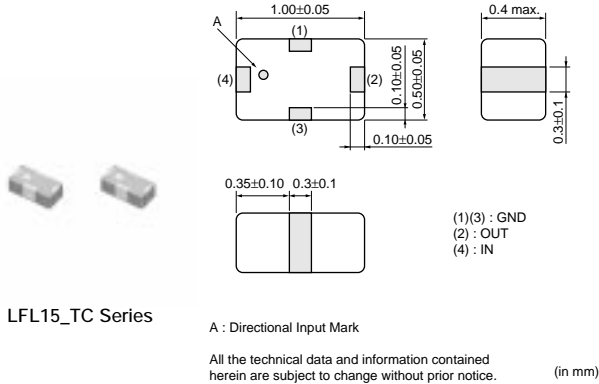


| Part Number | Nominal Center Frequency (fo) (MHz) | Bandwidth (BW) (MHz) | Insertion Loss in BW (dB) | Attenuation (Absolute Value) I) (dB) | Attenuation (Absolute Value) II) (dB) | Application |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFB311G90SP1-798 | 1906.5 | fo±13.5 | 1.0 max. (at 25°C) | 40 min. at 1405~1440MHz | 12.0 min. at 1649~1680MHz | PHS |
| LFB312G45SP1A502 | 2450 | fo±50 | 1.2 max. (at 25°C) | 20 min. at 902~928MHz | 35 min. at 1500~1550MHz | WLAN/BT |

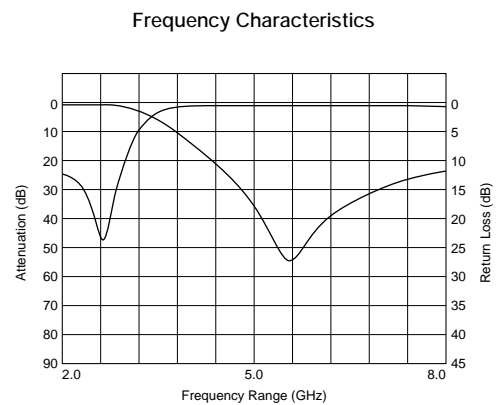
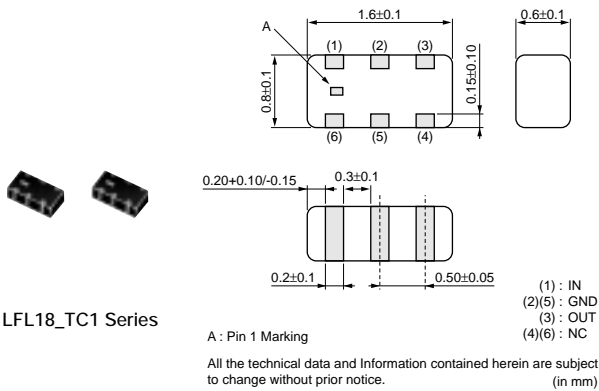
for RF/Local

Chip Multilayer LC Filters (LPF)

● LFL15_TC (0402) /LFL18_TC (0603) /LFL21_TC (0805) Series



LFL15_TC Series



LFL18_TC1 Series

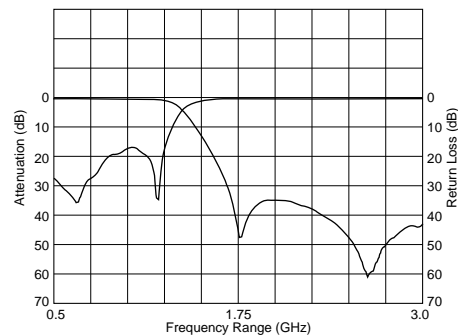
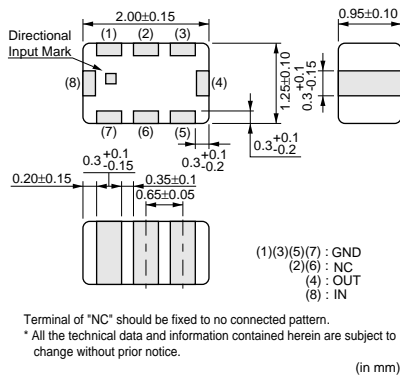
Continued on the following page.

Continued from the preceding page.

Frequency Characteristics



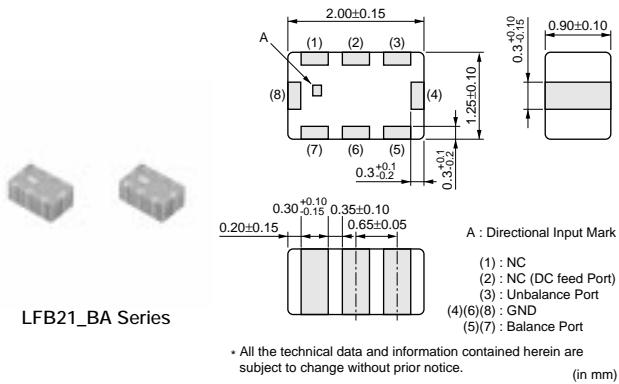
LFL21_TC Series



| 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 |
|------------------|-------------------------------------|----------------------|---------------------------|--------------------------------------|---------------------------------------|-------------|
| LFL152G45TC1A219 | 2450 | fo±50 | 0.45 max. (at 25°C) | 21 min. at 2x(fo±50.0)MHz | 21 min. at 3x(fo±50.0)MHz | WLAN/BT |
| LFL182G45TC1A108 | 2450 | fo±50 | 0.37 max. (at 25°C) | 27 min. at 4800~5000MHz | 25 min. at 7200~7500MHz | WLAN/BT |
| LFL182G45TC1A202 | 2450 | fo±50 | 0.40 max. (at 25°C) | 27 min. at 4800~5000MHz | 30 min. at 7200~7500MHz | WLAN/BT |
| LFL182G50TC1B905 | 2500 | fo±200 | 0.4 max. (at 25°C) | 21 min. at 4600~5400MHz | 22 min. at 6900~8100MHz | WIMAX |
| LFL182G54TC1B838 | 2545 | fo±145 | 0.4 max. (at 25°C) | 26 min. at 4800~5390MHz | 23 min. at 7200~8085MHz | WIMAX |
| LFL183G55TC2B908 | 3550 | fo±250 | 0.45 max. (at 25°C) | 17 min. at 6600~7600MHz | 20 min. at 9900~11400MHz | WIMAX |
| LFL21902MTC1A018 | 902.5 | fo±12.5 | 0.6 max. (at 25°C) | 30 min. at 2x(fo±12.5)MHz | 30 min. at 3x(fo±12.5)MHz | GSM |
| LFL211G90TC1A008 | 1907.5 | fo±12.5 | 0.47 max. (at 25°C) | 30 min. at 2x(fo±12.5)MHz | 25 min. at 3x(fo±12.5)MHz | PHS |
| LFL211G92TC1A060 | 1920 | fo±70 | 0.6 max. (at 25°C) | 24 min. at 3335~3700MHz | 30 min. at 3700~3820MHz | UMTS(Band1) |
| LFL212G45TC1A007 | 2450 | fo±50 | 0.50 max. (at 25°C) | 27 min. at 2x(fo±50.0)MHz | 30 min. at 3x(fo±50.0)MHz | WLAN/BT |
| LFL215G25TC1A156 | 5250 | fo±100.0 | 0.70 max. (at 25°C) | 24 min. at 2x(fo±100)MHz | 19 min. at 3x(fo±100)MHz | WLAN/BT |
| LFL215G37TC1A210 | 5375 | fo±475 | 0.70 max. (at 25°C) | 30 min. at 2x(fo±475)MHz | 20 min. at 3x(fo±475)MHz | WLAN/BT |
| LFL215G51TC1A149 | 5512 | fo±363 | 0.70 max. (at 25°C) | 30 min. at 2x(fo±363)MHz | 20 min. at 3x(fo±363)MHz | WLAN/BT |
| LFL215G78TC1A155 | 5787.5 | fo±62.5 | 0.70 max. (at 25°C) | 30 min. at 2x(fo±62.5)MHz | 20 min. at 3x(fo±62.5)MHz | WLAN/BT |

for RF/Local

Chip Multilayer LC Filters (Balanced Filters)



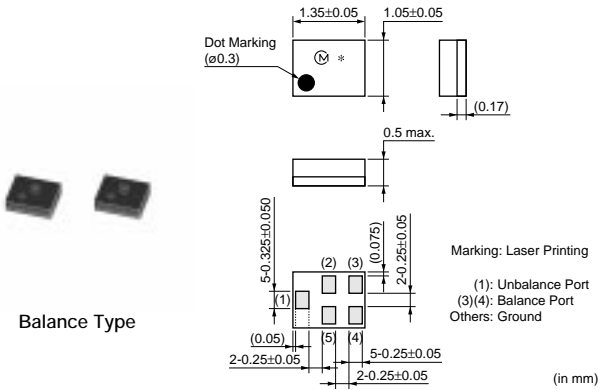
LFB21_BA Series

| 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 |
|------------------|-------------------------------------|----------------------|---------------------------|--|----------------------------------|-------------|
| LFB212G45BA1A220 | 2450 | fo±50 | 3.5 max. (at 25°C) | 34.2 -j95.0ohm (Differential) Source Impedance | 50 | WLAN/BT |
| LFB212G45BA1A234 | 2450 | fo±50 | 3.5 max. (at 25°C) | 50 | 50 | WLAN/BT |
| LFB212G45BA1B759 | 2450 | fo±50 | 3.5 max. (at 25°C) | 100 | 50 | WLAN/BT |
| LFB212G45BA1B763 | 2450 | fo±50 | 3.5 max. (at 25°C) | 50 +j50ohm (Differential) Source Impedance | 50 | WLAN/BT |
| LFB215G37BA1A233 | 5375 | fo±475 | 2.8 max. (at 25°C) | 100 | 50 | WLAN/BT |
| LFB2H2G44BB5B754 | 2441.75 | fo±41.75 | 3.3 max. (at 25°C) | 120 | 50 | WLAN/BT |
| LFB2H2G45BB1A221 | 2450 | fo±50 | 3.0 max. (at 25°C) | 75 | 50 | WLAN/BT |
| LFB2H2G45BB1A243 | 2450 | fo±50 | 3.0 max. (at 25°C) | 100 | 50 | WLAN/BT |
| LFB2H2G60BB1B973 | 2600 | fo±100 | 3.3 max. (at 25°C) | 100 | 50 | WIMAX |

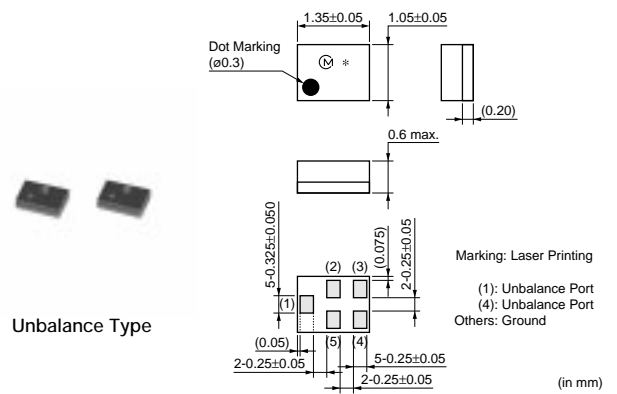
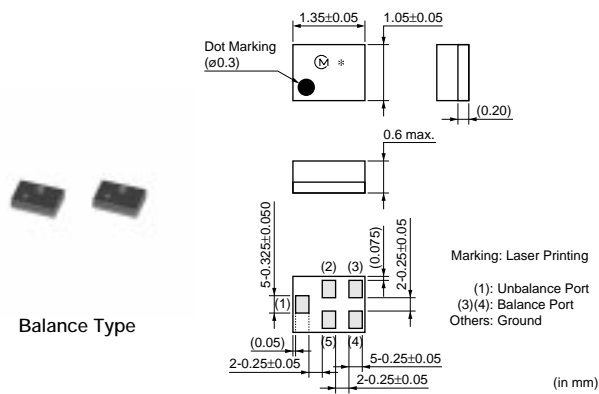
for RF/Local

SAW Filters

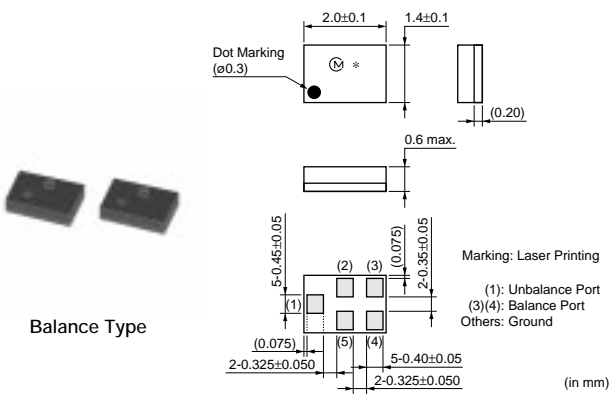
● SAFEA Series



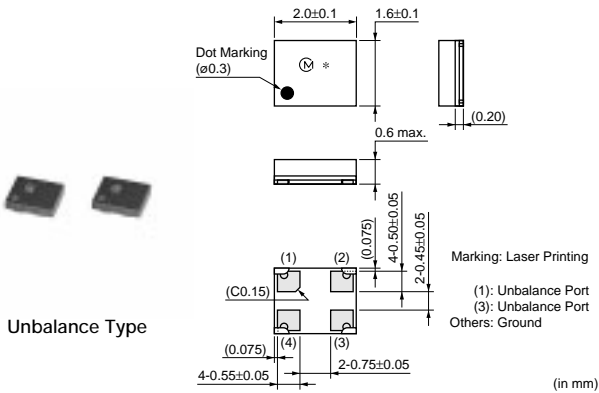
● SAFEB Series



● SAFED Series



● SAFEF Series



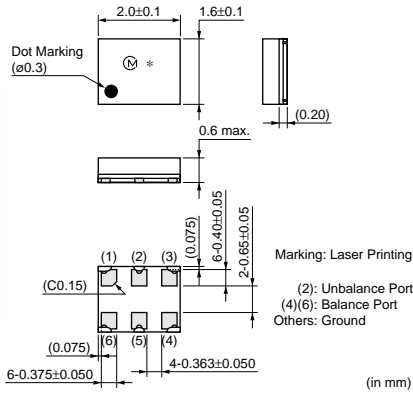
Continued on the following page.

Continued from the preceding page.

● SAFEH Series



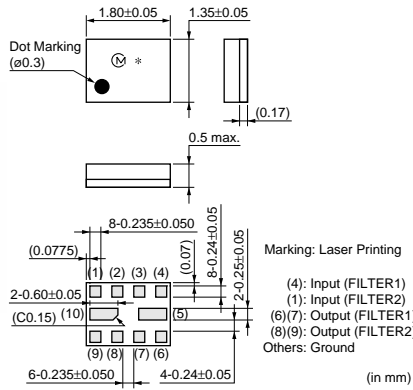
Balance Type



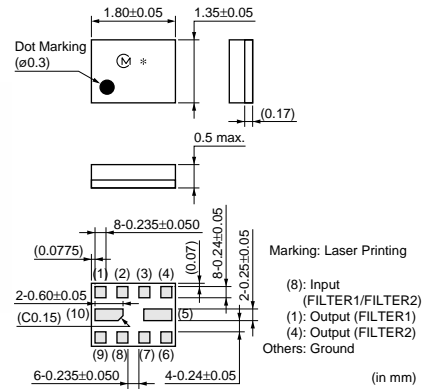
● SAWEN Series



Balance Type



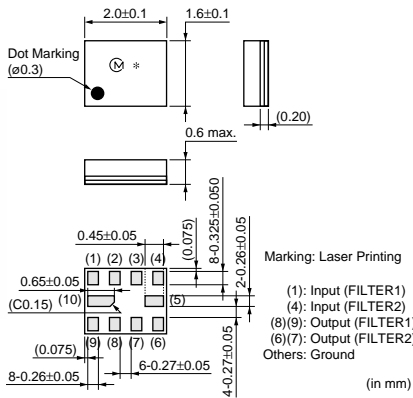
Unbalance Type



● SAWEP Series



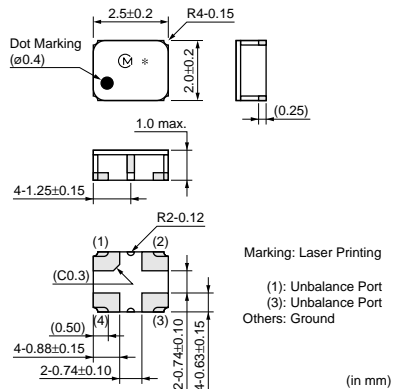
Balance Type



● SAFSE Series



Unbalance Type



Note • This PDF catalog is downloaded from the website of Murata Manufacturing co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
 • This PDF catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

● GPS

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-------------------------------------|--------------------------------|-------------------------------------|-----------------|---------------------|
| SAFEB1G57FA0F00 | 1575.5 | 1.6 max. (1574MHz-1577MHz) | 0.6 (1574MHz-1577MHz) | 1.7 max. (1574MHz-1577MHz) | 50ohm | 100ohm (Balance) |
| SAFEB1G57KB0F00 | 1575.42 | 0.8 max. (1574.22MHz-1576.62MHz) | 0.5 (1574.22MHz-1576.62MHz) | 2.0 max. (1574.22MHz-1576.62MHz) | 50ohm | 50ohm |
| SAFEB1G57KE0F00 | 1575.5 | 1.3 max. (1573.92MHz-1576.92MHz) | 0.6 (1573.92MHz-1576.92MHz) | 1.7 max. (1573.92MHz-1576.92MHz) | 50ohm | 50ohm |
| SAFSE1G57KA0T90 | 1575.42 | 2.0 max. (1574.42MHz-1576.42MHz) | 1.5 (1574.42MHz-1576.42MHz) | 1.8 max. (1574.42MHz-1576.42MHz) | 50ohm | 50ohm |

● GSM850

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-----------------------------|------------------------|-----------------------------|-----------------|---------------------------|
| SAFEA881MFL0F00 | 881.5 | 1.9 max. (869MHz-894MHz) | 1.0 (869MHz-894MHz) | 1.7 max. (869MHz-894MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAFEB881MAL0F00 | 881.5 | 2.6 max. (869MHz-894MHz) | 1.2 (869MHz-894MHz) | 2.0 max. (869MHz-894MHz) | 50ohm | 50ohm |
| SAFED881MFL0F05 | 881.5 | 2.0 max. (869MHz-894MHz) | 1.1 (869MHz-894MHz) | 1.8 max. (869MHz-894MHz) | 50ohm | 150ohm//68nH (Balance) |

● GSM850/GSM900 Dual Band

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|-------------------------------|------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------|---------------------------|
| SAWEN881MCN0F00(881.5) | 881.5 | 2.0 max. (869MHz-894MHz) | 1.1 max. (869MHz-894MHz) | 2.0 max. (869MHz-894MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEN881MCN0F00(942.5) | 942.5 | 2.4 max. (925MHz-960MHz) | 1.5 max. (925MHz-960MHz) | 2.1 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEP881MCQ0F00(881.5) | 881.5 | 2.0 max. (869MHz-894MHz) | 1.1 (869MHz-894MHz) | 2.0 max. (869MHz-894MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEP881MCQ0F00(942.5) | 942.5 | 2.4 max. (925MHz-960MHz) | 1.5 (925MHz-960MHz) | 2.1 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |

● GSM850/GSM1900 Dual Band

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|-------------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------|---------------------------|
| SAWEN881MCM2F00(881.5) | 881.5 | 2.0 max. (869MHz-894MHz) | 1.1 max. (869MHz-894MHz) | 2.0 max. (869MHz-894MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEN881MCM2F00(1960) | 1960 | 2.6 max. (1930MHz-1990MHz) | 1.8 max. (1930-1990MHz) | 2.2 max. (1930-1990MHz) | 50ohm | 150ohm//22nH (Balance) |
| SAWEP881MCN2F00(881.5) | 881.5 | 2.3 max. (869MHz-894MHz) | 1.2 max. (869MHz-894MHz) | 1.8 max. (869MHz-894MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEP881MCN2F00(1960) | 1960 | 2.6 max. (1930MHz-1990MHz) | 1.8 max. (1930MHz-1990MHz) | 2.2 max. (1930MHz-1990MHz) | 50ohm | 150ohm//18nH (Balance) |

● GSM900

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-----------------------------|------------------------|-----------------------------|-----------------|---------------------------|
| SAFEA942MFL0F00 | 942.5 | 2.3 max. (925MHz-960MHz) | 1.4 (925MHz-960MHz) | 2.0 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAFEB942MAL0F00 | 942.5 | 2.7 max. (925MHz-960MHz) | 1.7 (925MHz-960MHz) | 2.0 max. (925MHz-960MHz) | 50ohm | 50ohm |
| SAFED942MFM0F00 | 942.5 | 2.2 max. (925MHz-960MHz) | 1.3 (925MHz-960MHz) | 2.1 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |

● GSM900/GSM1800 Dual Band

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|--------------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------|---------------------------|
| SAWEN942MCN0F00(942.5) | 942.5 | 2.3 max. (925MHz-960MHz) | 1.5 max. (925MHz-960MHz) | 2.0 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEN942MCN0F00(1842.5) | 1842.5 | 2.5 max. (1805MHz-1880MHz) | 1.5 max. (1805MHz-1880MHz) | 2.3 max. (1805MHz-1880MHz) | 50ohm | 150ohm//15nH (Balance) |
| SAWEP942MCN0F00(942.5) | 942.5 | 2.3 max. (925MHz-960MHz) | 1.3 (925MHz-960MHz) | 2.1 max. (925MHz-960MHz) | 50ohm | 150ohm//82nH (Balance) |
| SAWEP942MCN0F00(1842.5) | 1842.5 | 2.2 max. (1805MHz-1880MHz) | 1.2 (1805MHz-1880MHz) | 2.2 max. (1805MHz-1880MHz) | 50ohm | 150ohm//15nH (Balance) |

● GSM1800

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-------------------------------|--------------------------|-------------------------------|-----------------|---------------------------|
| SAFEA1F84FA0F00 | 1842.5 | 2.2 max. (1805MHz-1880MHz) | 1.5 (1805MHz-1880MHz) | 2.1 max. (1805MHz-1880MHz) | 50ohm | 150ohm//18nH (Balance) |
| SAFEB1G84AA0F00 | 1842.5 | 2.8 max. (1805MHz-1880MHz) | 1.6 (1805MHz-1880MHz) | 2.5 max. (1805MHz-1880MHz) | 50ohm | 50ohm |
| SAFED1G84FB0F00 | 1842.5 | 2.0 max. (1805-1880MHz) | 1.3 (1805MHz-1880MHz) | 2.5 max. (1805MHz-1880MHz) | 50ohm | 150ohm//18nH (Balance) |

● GSM1800/GSM1900 Dual Band

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|--------------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------|---------------------------|
| SAWEN1G84CN0F00(1842.5) | 1842.5 | 2.5 max. (1805MHz-1880MHz) | 1.8 max. (1805MHz-1880MHz) | 2.2 max. (1805MHz-1880MHz) | 50ohm | 150ohm//15nH (Balance) |
| SAWEN1G84CN0F00(1960) | 1960 | 2.6 max. (1930MHz-1990MHz) | 1.8 max. (1930MHz-1990MHz) | 2.2 max. (1930MHz-1990MHz) | 50ohm | 150ohm//22nH (Balance) |
| SAWEP1G84CQ0F00(1842.5) | 1842.5 | 2.5 max. (1805MHz-1880MHz) | 1.5 (1805MHz-1880MHz) | 2.2 max. (1805MHz-1880MHz) | 50ohm | 150ohm//15nH (Balance) |
| SAWEP1G84CQ0F00(1960) | 1960 | 2.6 max. (1930MHz-1990MHz) | 1.8 (1930MHz-1990MHz) | 2.2 max. (1930MHz-1990MHz) | 50ohm | 150ohm//18nH (Balance) |

● GSM1900

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-------------------------------|--------------------------|-------------------------------|-----------------|---------------------------|
| SAFEA1G96FA0F00 | 1960 | 2.6 max. (1930MHz-1990MHz) | 1.7 (1930MHz-1990MHz) | 2.2 max. (1930MHz-1990MHz) | 50ohm | 150ohm//27nH (Balance) |
| SAFED1G96FA0F00 | 1960 | 2.9 max. (1930-1990MHz) | 1.8 (1930MHz-1990MHz) | 2.4 max. (1930MHz-1990MHz) | 50ohm | 150ohm//18nH (Balance) |
| SAFEB1G96AA0F00 | 1960 | 2.8 max. (1930MHz-1990MHz) | 1.7 (1930MHz-1990MHz) | 2.5 max. (1930MHz-1990MHz) | 50ohm | 50ohm |

● J-CDMA

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|-------------------------------|------------------------|-----------------------------|-----------------------------|--|-----------------|---------------------|
| SAFEA859MCL0F00 | 859 | 2.9 max. (843MHz-875MHz) | 2.0 max. (843MHz-875MHz) | 2.3 max. (843MHz-875MHz) | 50ohm | 100ohm (Balance) |
| SAFEB859MAL0F00 | 859 | 3.2 max. (843MHz-875MHz) | 1.8 max. (843MHz-875MHz) | 2.0 max. (843MHz-870MHz) 2.2 max. (870MHz-875MHz) | 50ohm | 50ohm |
| SAFEB911MAL0F00 | 911.5 | 2.2 max. (898MHz-925MHz) | 1.2 (898MHz-925MHz) | 2.0 max. (898MHz-925MHz) | 50ohm | 50ohm |
| SAWEN827MAA0F00(827) | 827 | 3.0 max. (824MHz-830MHz) | 1.3 max. (824MHz-830MHz) | 2.0 max. (824MHz-830MHz) | 50ohm | 50ohm |
| SAWEN827MAA0F00(911.5) | 911.5 | 3.0 max. (898MHz-925MHz) | 1.5 max. (898MHz-925MHz) | 2.1 max. (898MHz-925MHz) | 50ohm | 50ohm |

● PCS(CDMA)

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|--|-------------------------------|-------------------------------|-----------------|---------------------|
| SAFEB1G88KA0F00 | 1880 | 4.0 max. (1850MHz-1910MHz) | 3.1 max. (1850MHz-1910MHz) | 1.9 max. (1850MHz-1910MHz) | 50ohm | 50ohm |
| SAFEB1G96FL0F00 | 1960 | 3.3 max. (1930MHz-1990MHz) | 1.8 max. (1930MHz-1990MHz) | 2.4 max. (1930MHz-1990MHz) | 50ohm | 100ohm (Balance) |
| SAFEB1G96KA0F00 | 1960 | 3.3 max. (1930MHz-1990MHz) 3.1 max. (1930.4MHz-1989.6MHz) | 2.3 max. (1930MHz-1990MHz) | 2.2 max. (1930MHz-1990MHz) | 50ohm | 50ohm |

● W-CDMA

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|----------------------------|--------------------------|-------------------------------|-----------------|---------------------------|
| SAFEB1G95FL0F00 | 1950 | 2.6 max. (1920-1980MHz) | 1.3 (1920MHz-1980MHz) | 1.8 max. (1920MHz-1980MHz) | 200ohm//27nH | 50ohm (Balance) |
| SAFEB1G95KA0F00 | 1950 | 2.9 max. (1920-1980MHz) | 2.0 (1920MHz-1980MHz) | 2 max. (1920MHz-1980MHz) | 50ohm | 50ohm |
| SAFEH1G95FL0F00 | 1950 | 2.8 max. (1920-1980MHz) | 1.5 (1920MHz-1980MHz) | 2 max. (1920MHz-1980MHz) | 200ohm//33nH | 50ohm (Balance) |
| SAFEB2G14FA0F00 | 2140 | 2.3 max. (2110-2170MHz) | 1.2 (2110MHz-2170MHz) | 1.8 max. (2110MHz-2170MHz) | 50ohm | 200ohm//27nH (Balance) |
| SAFEB2G14FB0F00 | 2140 | 2.5 max. (2110-2170MHz) | 1.5 (2110-2170MHz) | 1.9 max. (2110-2170MHz) | 50ohm | 100ohm//27nH (Balance) |
| SAFEB2G14AL0F00 | 2140 | 3.5 max. (2110-2170MHz) | 1.6 (2110-2170MHz) | 2.0 max. (2110-2170MHz) | 50ohm | 50ohm |
| SAFEH2G14FA0F00 | 2140 | 2.3 max. (2110-2170MHz) | 1.2 (2110MHz-2170MHz) | 1.8 max. (2110MHz-2170MHz) | 50ohm | 200ohm//27nH (Balance) |

● CDMA800/TDMA800/E-AMPS/GSM850

| Part Number | Center Frequency (MHz) | Insertion Loss (dB) | Ripple (dB max.) | VSWR | Input Impedance | Output Impedance |
|------------------------|------------------------|-----------------------------|------------------------|-----------------------------|-----------------|---------------------|
| SAFEB881MFM0F00 | 881.5 | 2.2 max. (869MHz-894MHz) | 1.5 (869MHz-894MHz) | 2.0 max. (869MHz-894MHz) | 50ohm | 100ohm (Balance) |
| SAFEB836MAL0F00 | 836.5 | 2.5 max. (824MHz-849MHz) | 1.8 (824MHz-849MHz) | 1.9 max. (824MHz-849MHz) | 50ohm | 50ohm |
| SAFEF836MAL0F00 | 836.5 | 2.8 max. (824MHz-849MHz) | 1.4 (824MHz-849MHz) | 1.9 max. (824MHz-849MHz) | 50ohm | 50ohm |