

RF Devices and Customer made Antenna

Product catalog

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Product Portfolio



Multilayer Ceramic Capacitors (MLCC)



Chip-Resistor



Disc Capacitors



RF Device and High Frequency Inductors



Antenna



Inductors



Varistors and SMD-Varistors

IEC-63 Nominal Resistance / Capacitance

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| E1 | 100 | | | | | | | | | | | | | | | | | | | | | | | |
| E3 | 100 | | | | 220 | | | | | 470 | | | | | | | | | | | | | | |
| E6 | 100 | 150 | 220 | 330 | 470 | 680 | | | | | | | | | | | | | | | | | | |
| E12 | 100 | 120 | 150 | 180 | 220 | 270 | 330 | 390 | 470 | 560 | 680 | 820 | | | | | | | | | | | | |
| E24 | 100 | 110 | 120 | 130 | 150 | 160 | 180 | 200 | 220 | 240 | 270 | 300 | 330 | 360 | 390 | 430 | 470 | 510 | 560 | 620 | 680 | 750 | 820 | 910 |
| E96 | 100 | 102 | 121 | 124 | 147 | 150 | 178 | 182 | 215 | 221 | 261 | 267 | 316 | 324 | 383 | 392 | 464 | 475 | 562 | 576 | 681 | 698 | 825 | 845 |
| | 105 | 107 | 127 | 130 | 154 | 158 | 187 | 191 | 226 | 232 | 274 | 280 | 332 | 340 | 402 | 412 | 487 | 499 | 590 | 604 | 715 | 732 | 866 | 887 |
| | 110 | 113 | 133 | 137 | 162 | 165 | 196 | 200 | 237 | 243 | 287 | 294 | 348 | 357 | 422 | 432 | 511 | 523 | 619 | 634 | 750 | 768 | 909 | 931 |
| | 115 | 118 | 140 | 143 | 169 | 174 | 205 | 210 | 249 | 255 | 301 | 309 | 365 | 374 | 442 | 453 | 536 | 549 | 649 | 665 | 787 | 806 | 953 | 976 |

E6: $\sqrt[6]{10} \approx 1.46$ E12: $\sqrt[12]{10} \approx 1.21$

E1 series resistance: 1Ω, 10Ω, 100Ω, 1000Ω, 10000Ω, 100000Ω

■ CHIP ANTENNA

| RF | ANT | 321612 | 0 | A | 5 | T |
|---------------|--|--|--------------------------|--|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF/RG: device | ANT : Antenna FRA : Free Antenna ECA : SMD Antenna | Per 2 digits of Length, Width, Thickness 321612 = Length =32 Width = 16 Thickness = 12 | 0 : 0.1 mm 1 : 1.0 mm | A: 2.4GHz ISM Band E : GPS 1.5GHz L : 2.4/5.2/5.8GHz Tri Band W : WiMAX | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

■ HIGH FREQUENCY MULTILAYER BAND PASS FILTER

| RF | BPF | 322515 | 0 | A | 4 | T |
|-----------|------------------------|--|--------------------------|---|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF device | BPF : Band Pass Filter | Per 2 digits of Length, Width, Thickness 322515 = Length =32 Width = 25 Thickness = 15 | 0 : 0.1 mm 1 : 1.0 mm | A : 2.4GHz ISM Band W : WiMAX K : ISM 5.2/5.8 Dual Band | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

■ HIGH FREQUENCY MULTILAYER BALANCED FILTER

| RF | BPB | 252009 | 0 | A | 7 | T |
|---------------|--------------------------------------|--|--------------------------|----------------------------------|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF/RG: device | BPB : Balanced Type Band Pass Filter | Per 2 digits of Length, Width, Thickness 252009 = Length =25 Width = 20 Thickness = 09 | 0 : 0.1 mm 1 : 1.0 mm | A : 2.4GHz ISM Band W : WiMAX | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

■ HIGH FREQUENCY MULTILAYER LOW PASS FILTER

| RF | LPF | 201211 | 0 | A | 0 | T |
|-----------|-----------------------|--|--------------------------|--|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF device | LPF : Low Pass Filter | Per 2 digits of Length, Width, Thickness 201210 = Length =20 Width = 12 Thickness = 11 | 0 : 0.1 mm 1 : 1.0 mm | A : 2.4GHz ISM Band K : ISM 5.2/5.8 Dual Band | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

■ HIGH FREQUENCY MULTILAYER HIGH PASS FILTER

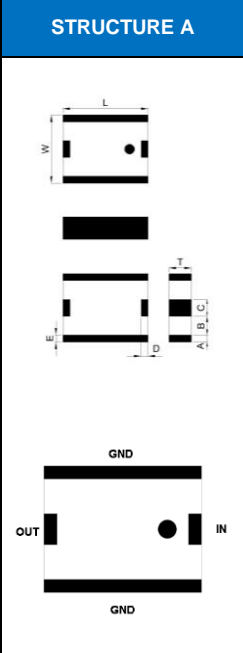
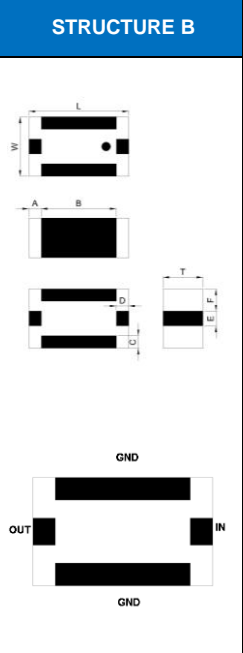
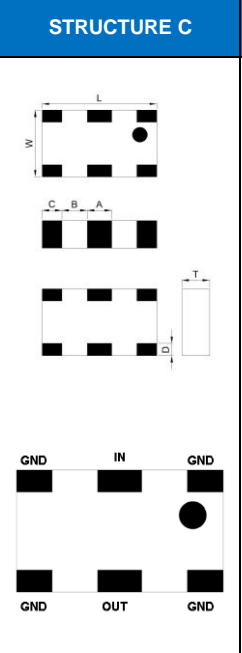
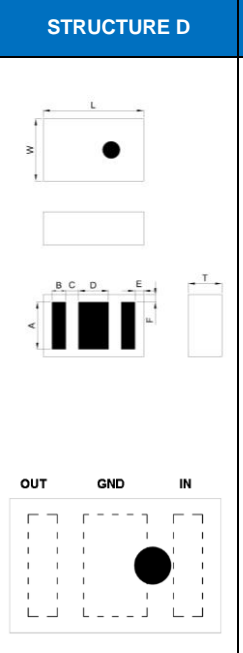
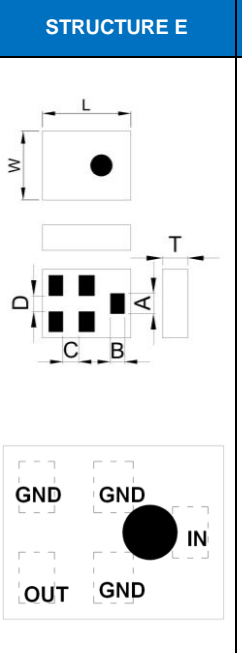
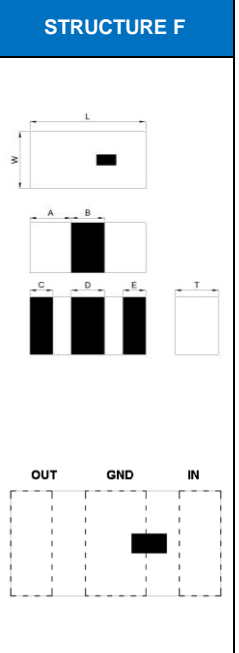
| RF | HPF | 252009 | 0 | L | 0 | T |
|-----------|------------------------|---|--------------------------|---|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF device | HPF : High Pass Filter | Per 2 digits of Length, Width, Thickness 252009 = Length =2.5 Width = 2.0 Thickness = 0.9 | 0 : 0.1 mm 1 : 1.0 mm | L : 2.4/4.9/5.2/5.8GHz Multiband Application | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

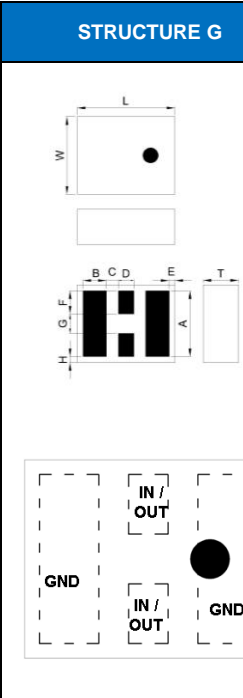
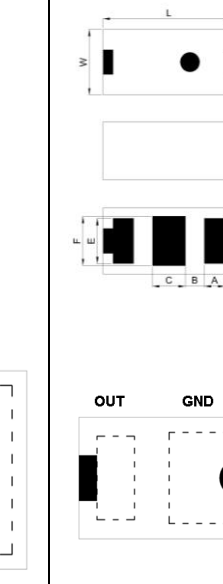
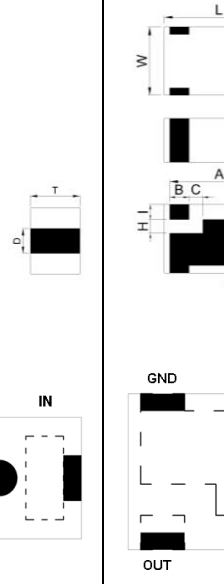
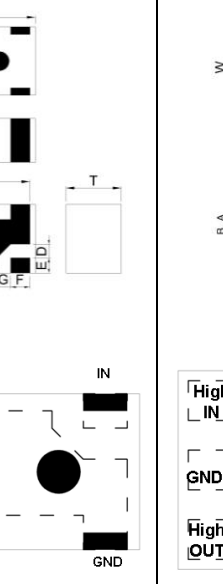
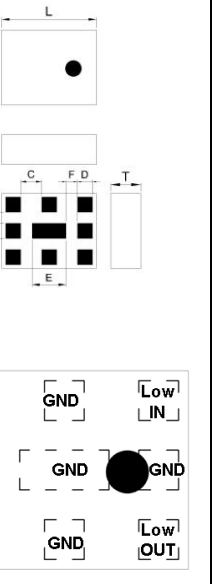
■ BALUN TRANSFORMERS

| RF | BLN | 201208 | 0 | A | 4 | T |
|---------------|--------------|--|--------------------------|--|---|-------------------------------|
| Type code | Product code | Dimension code | Unit of dimension | Application | Specification | Packing |
| RF/RG: device | BLN : BALUN | Per 2 digits of Length, Width, Thickness 201208 = Length =20 Width = 12 Thickness = 08 | 0 : 0.1 mm 1 : 1.0 mm | A : 2.4GHz ISM Band K : ISM 5.2/5.8 Dual Band | Code from 0-9 dependent on different electrical specification | T: 7" Reeled G: 13" Reeled |

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

■ STRUCTURE AND PIN ASSOCIATED

| STRUCTURE A | STRUCTURE B | STRUCTURE C | STRUCTURE D | STRUCTURE E | STRUCTURE F |
|--|---|---|--|---|---|
|  |  |  |  |  |  |

| STRUCTURE G | STRUCTURE H | STRUCTURE I | STRUCTURE J | STRUCTURE K |
|--|---|---|--|---|
|  |  |  |  |  |

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

■ STRUCTURE AND DIMENSION

Unit: mm

| Structure/ Dimension | L | W | T | A | B | C | D | E | F | G | H | I |
|-------------------------|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|-----------|-----------|------------|
| A | 2.50±0.20 | 2.00±0.20 | 0.70±0.10 | 0.20±0.20 | 0.55±0.20 | 0.50±0.20 | 0.25±0.20 | 0.20±0.20 | - | - | - | - |
| | | | 0.80±0.10 | 0.20±0.20 | 0.55±0.20 | 0.50±0.20 | 0.20±0.20 | 0.20±0.20 | - | - | - | - |
| | | | 1.00±0.10 | 0.20±0.20 | 0.50±0.20 | 0.50±0.20 | 0.25±0.20 | 0.20±0.20 | - | - | - | - |
| | | | 1.05±0.10 | 0.25±0.20 | 0.50±0.20 | 0.50±0.20 | 0.25±0.20 | 0.25±0.20 | - | - | - | - |
| | | | 1.20±0.10 | 0.25±0.20 | 0.50±0.20 | 0.50±0.20 | 0.25±0.20 | 0.25±0.20 | - | - | - | - |
| | 3.20±0.20 | 2.50±0.10 | 1.50±0.10 | 0.40±0.20 | 0.60±0.20 | 0.70±0.20 | 0.20±0.15 | 0.40±0.20 | - | - | - | - |
| B | 1.00±0.10 | 0.50±0.10 | 0.40±0.10 | 0.30±0.10 | 0.30±0.10 | 0.35±0.10 | 0.15±0.10 | 0.15±0.10 | - | - | - | - |
| | 1.60±0.15 | 0.80±0.15 | 0.50±0.10 | 0.35±0.10 | 0.30±0.10 | 0.15±0.10 | 0.15±0.10 | 0.30±0.10 | - | - | - | - |
| | | | 0.60±0.10 | 0.45±0.15 | 0.45±0.15 | 0.20±0.15 | 0.20±0.15 | 0.30±0.15 | - | - | - | - |
| | | | 0.70±0.10 | 0.45±0.15 | 0.70±0.15 | 0.20±0.10 | 0.20±0.10 | 0.30±0.15 | - | - | - | - |
| | 2.00±0.15 | 1.20±0.15 | 0.50±0.10 | 0.40±0.15 | 0.80±0.15 | 0.20±0.10 | 0.20±0.10 | 0.30±0.15 | - | - | - | - |
| | | | 0.90±0.10 | 0.45±0.15 | 1.10±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - |
| | | 1.25±0.15 | 0.50±0.15 | 1.00±0.15 | 0.20±0.15 | 0.20±0.15 | 0.30±0.15 | 0.45±0.15 | - | - | - | - |
| | | | 0.60±0.10 | 0.45±0.15 | 1.10±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - |
| | | | 0.80±0.10 | 0.50±0.15 | 1.00±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - |
| | | | 0.90±0.10 | 0.50±0.15 | 1.00±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - |
| | 0.95±0.10 | 0.35±0.15 | 1.30±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - | | |
| | 0.50±0.15 | 1.00±0.15 | 0.25±0.15 | 0.25±0.15 | 0.30±0.15 | - | - | - | - | - | | |
| C | 2.00±0.15 | 1.20±0.20 | 0.55±0.10 | 0.40±0.20 | 0.40±0.20 | 0.40±0.20 | 0.40±0.20 | 0.20±0.10 | - | - | - | - |
| | | | 0.60±0.10 | 0.40±0.20 | 0.40±0.20 | 0.40±0.20 | 0.20±0.10 | - | - | - | - | |
| | | | 0.80±0.10 | 0.40±0.20 | 0.40±0.20 | 0.40±0.20 | 0.40±0.20 | 0.20±0.10 | - | - | - | - |
| D | 1.60±0.15 | 0.80±0.15 | 0.60±0.10 | 0.55±0.10 | 0.25±0.10 | 0.23±0.10 | 0.40±0.10 | 0.12±0.10 | 0.125±0.10 | - | - | - |
| | 2.00±0.15 | 1.25±0.10 | 0.45±0.10 | 0.95±0.10 | 0.275±0.20 | 0.25±0.10 | 0.60±0.10 | 0.175±0.10 | 0.15±0.10 | - | - | - |
| | | | 0.70 max | 0.95±0.10 | 0.275±0.10 | 0.25±0.10 | 0.60±0.10 | 0.175±0.10 | 0.15±0.10 | - | - | - |
| 0.80±0.10 | 0.95±0.10 | 0.275±0.10 | 0.25±0.10 | 0.60±0.10 | 0.175±0.10 | 0.15±0.10 | - | - | - | - | | |
| E | 1.10±0.10 | 0.90±0.10 | 0.60±0.10 | 0.25±0.10 | 0.18±0.10 | 0.205±0.10 | 0.25±0.10 | - | - | - | - | - |
| | 1.40±0.15 | 1.10±0.15 | 0.70±0.10 | 0.325±0.10 | 0.25±0.10 | 0.25±0.10 | 0.25±0.10 | - | - | - | - | - |
| | 2.00±0.20 | 1.25±0.20 | 1.00 max. | 0.325±0.10 | 0.25±0.10 | 0.25±0.10 | 0.25±0.10 | - | - | - | - | - |
| F | 1.60±0.15 | 0.80±0.15 | 0.40±0.10 | 0.55±0.15 | 0.50±0.15 | 0.35±0.15 | 0.50±0.15 | 0.20±0.15 | - | - | - | - |
| | | | 0.60±0.10 | 0.55±0.15 | 0.50±0.15 | 0.35±0.15 | 0.50±0.15 | 0.20±0.15 | - | - | - | - |
| G | 2.00±0.15 | 1.25±0.10 | 0.80±0.10 | 0.95±0.10 | 0.40±0.10 | 0.30±0.10 | 0.30±0.10 | 0.15±0.10 | 0.30±0.10 | 0.35±0.10 | 0.15±0.10 | - |
| | | | 0.90±0.10 | 0.95±0.10 | 0.40±0.10 | 0.30±0.10 | 0.30±0.10 | 0.15±0.10 | 0.30±0.10 | 0.35±0.10 | 0.15±0.10 | - |
| | 2.50±0.20 | 2.00±0.20 | 0.90±0.10 | 1.70±0.20 | 0.60±0.20 | 0.30±0.20 | 0.40±0.20 | 0.15±0.10 | 0.60±0.10 | 0.50±0.10 | 0.15±0.10 | - |
| H | 1.60±0.15 | 0.80±0.10 | 0.60 max. | 0.25±0.10 | 0.23±0.05 | 0.40±0.10 | 0.30±0.10 | 0.55±0.10 | 0.60±0.10 | - | - | - |
| I | 2.00±0.15 | 1.25±0.10 | 1.00 max. | 1.80±0.10 | 0.35±0.10 | 0.25±0.10 | 0.25±0.10 | 0.275±0.10 | 0.35±0.10 | 0.25±0.10 | 0.25±0.10 | 0.275±0.10 |
| J | 2.50±0.15 | 2.00±0.15 | 0.90±0.10 | 0.30±0.10 | 0.40±0.10 | 0.55±0.10 | 0.40±0.10 | 0.90±0.10 | 0.30±0.10 | - | - | - |
| K | 3.20±0.20 | 2.50±0.20 | 1.80±0.20 | 0.95±0.20 | 0.60±0.20 | 0.30±0.15 | 0.70±0.15 | 1.20±0.15 | 2.00±0.15 | - | - | - |

■ ELECTRICAL SPECIFICATION

2.4GHz BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|--------------------|----------------------|-------------------------------------|---|-------------|---------------|-----------------|-----------|
| RBBPF1005040A1T | 2.4~2.5 | 2.5 | 25(824~960 MHz) 20(1710~1910 MHz) 20(4800~5000 MHz) 15(7200~7500 MHz) | 2.0 | 50 | 1.00x0.50x0.40 | B |
| RFBPF1005040A3T | 2.4~2.5 | 1.5max.(25℃) 1.7max.(-40~+85℃) | 13(824~915MHz) 5(1545~1605MHz) 34(4800~5000MHz) 20(7200~7500 MHz) | 2.1 | 50 | 1.00x0.50x0.40 | B |
| RFBPF1109060A0T | 2.4~2.5 | 1.8 | 35(824~960MHz) 38(1545~1605MHz) 20(1710~1990MHz) 8(2110~2170MHz) 35(3600 MHz) 35(4800~5000 MHz) 35(7200~7500 MHz) | 2.0 | 50 | 1.10x 0.90x0.60 | E |
| RFBPF1411060A1T | 2.4~2.5 | 1.8 | 40(824~960MHz) 40(1545~1605MHz) 20(1710~1990MHz) 8(2110~2170MHz) 35(3600 MHz) 35(4800~5000 MHz) 35(7200~7500 MHz) | 2.0 | 50 | 1.40x1.10x0.60 | E |
| RFBPF1411060A2T | 2.4~2.5 | 1.5 | 30(500~960MHz) 25(1500~1650MHz) 19(3200~3300MHz) 40(4800~5000 MHz) 30(7200~7500 MHz) | 2.0 | 50 | 1.40x1.10x0.60 | E |
| RBBPF1411060A3T | 2.4~2.5 | 1.1 | 20(50~960MHz) 10(1710~1990MHz) 9(3600 MHz) 22(4800~7200 MHz) | 2.0 | 50 | 1.40x1.10x0.60 | E |
| RFBPF1608060AA7M1U | 2.4~2.5 | 0.95max.(25℃) 1.25max.(-40~+85℃) | 20(500~960 MHz) 23(3200 MHz) 30(4800~5000 MHz) 32(7200~7500 MHz) | 2.0 | 50 | 1.60x0.80x0.60 | H |
| RFBPF1608060ADT | 2.4~2.5 | 1.8max.(25℃) 2.1max.(-40~+85℃) | 22.5(200~1300MHz) 5.5(2000MHz) 10.5(3000MHz) 23.5(3600~3800MHz) 35(4800~5000MHz) 35(7200~7500MHz) | 2.0 | 50 | 1.60x0.80x0.60 | B |
| RFBPF1608060AET | 2.4~2.5 | 1.7max.(25℃) 2.0max.(-40~+85℃) | 25(880 MHz) 20(3200 MHz) 35(4800~5000 MHz) 25(7200~7500 MHz) | 2.0 | 50 | 1.60x0.80x0.60 | F |
| RFBPF1608070AFT | 2.4~2.5 | 2.4max.(25℃) 2.7max.(-40~+85℃) | 24.5(80~960MHz) 20(1710~1990 MHz) 8.5(2170 MHz) 15(4800~5000 MHz) 20(7200~7500 MHz) | 2.0 | 50 | 1.60x0.80x0.70 | B |
| RFBPF1608070AWT | 2.4~2.5 | 2.0max.(25℃) 2.2max.(-40~+85℃) | 30 (960 MHz) 25(1910 MHz) 20(1990 MHz) 25(4800 MHz) 15(7200 MHz) | 2.0 | 50 | 1.60x0.80x0.70 | B |
| RFBPF1608050A0T | 2.4~2.5 | 2.0max.(25℃) 2.2max.(-40~+85℃) | 20(960 MHz) 20(1910 MHz) 15(1990 MHz) 18(4800 MHz) 25(7200 MHz) | 2.0 | 50 | 1.60x0.80x0.50 | B |
| RFBPF1608060A1T | 2.4~2.5 | 2.8 | 25(695~800MHz) 20(1910MHz) 35(3200MHz) 20(4800~5000MHz) 20(7200~7500MHz) | 2.0 | 50 | 1.60x0.80x0.60 | B |
| RFBPF1608060A7T | 2.4~2.5 | 3.0 | 25(695~800MHz) 20(1910MHz) 35(3200MHz) 20(4800~5000MHz) 20(7200~7500MHz) | 2.0 | 50 | 1.60x0.80x0.60 | B |
| RFBPF1608060A8T | 2.4~2.5 | 1.7 | 30(880~915MHz) 30(1710~1785MHz) 25(1850~1910MHz) 25(4800~5000MHz) 15(7200~7500MHz) | 2.0 | 50 | 1.60x0.80x0.60 | B |
| RFBPF1608070A3T | 2.4~2.5 | 1.8max.(25℃) 2.1max.(-40~+85℃) | 27(800~900 MHz) 25(4800~5000 MHz) 30(7200~7500 MHz) | 2.0 | 50 | 1.60x0.80x0.70 | B |

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

2.4GHz BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|--------------------|----------------------|-----------------------------------|---|-------------|---------------|----------------|-----------|
| RFBPF2012080AM0T62 | 2.4~2.5 | 1.8max.(25℃) 2.0max.(-40~+85℃) | 30(860~960MHz) 30(1545~1605MHz) 35(1710~1990MHz) 30(2170MHz) 30(4800~5000MHz) | 2.0 | 50 | 2.00x1.20x0.80 | D |
| RFBPF2012080AC2T00 | 2.4~2.5 | 1.35max. | 30(804~828MHz) 20(1608~1656MHz) 30(3216~3312MHz) 40(4020~4140MHz) 20(4824~4968MHz) 20(5628~5796MHz) 20(6432~6624MHz) 35(7200~7500MHz) 20(7500~10000MHz) | 2.0 | 50 | 2.00x1.25x0.80 | G |
| RFBPF2012090AS1T35 | 2.4~2.5 | 0.9max.(25℃) 1.1max.(-40~+85℃) | 28(824~960MHz) 30(1570~1580MHz) 15(1710~1910MHz) 9.5(1910~1990MHz) 25(4800~5000MHz) 25(7200~7500MHz) | 2.0 | 50 | 2.00x1.25x0.90 | G |
| RFBPF2012060AAT | 2.4~2.5 | 1.5max.(25℃) 1.8max.(-40~+85℃) | 30(880~960MHz) 25(1710~1910MHz) 25(4800~5000MHz) 30(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.60 | C |
| RFBPF2012040ABT | 2.4~2.5 | 2.5 | 30(824~849MHz) 30(880~915MHz) 30(1545~1605MHz) 30(1565~1585MHz) 35(1710~1785MHz) 40(1850~1910MHz) 32(1920~1980MHz) 7(3168~4752MHz) 11(3300~3800MHz) 35(4800~4967MHz) 26(5150~6000MHz) 23(7200~7450MHz) | 2.0 | 50 | 2.00x1.20x0.40 | D |
| RFBPF2012050ACT | 2.4~2.5 | 2.5 | 35(824~960MHz) 38(1710~1910MHz) 25(4880~5000MHz) 20(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.55 | C |
| RFBPF2012080ADT | 2.4~2.5 | 1.5max.(25℃) 1.7max.(-40~+85℃) | 30(860~960MHz) 30(1545~1605MHz) 30(1710~1990MHz) 30(2170MHz)(typical) 30(4800~5000MHz) | 2.0 | 50 | 2.00x1.25x0.80 | D |
| RFBPF2012080AFT | 2.4~2.5 | 1.8max.(25℃) 2.0max.(-40~+85℃) | 30(824~915MHz) 30(1545~1605MHz) 35(1710~1990MHz) 30(2170MHz) 30(4800~4967MHz) 25(5150~6000MHz) 20(7200~7450.5MHz) | 2.0 | 50 | 2.00x1.25x0.80 | D |
| RFBPF2012080AGT | 2.4~2.5 | 1.8max.(typ.1.5) | 35(824~960MHz) 28(1545~1605MHz) 30(1710~1990MHz) 30(2170MHz) 6(3200MHz) 30(4800~4967MHz) 20(5150~6000MHz) 18(7200~7450MHz) | 2.0 | 50 | 2.00x1.25x0.80 | D |
| RFBPF2012040AHT | 2.4~2.5 | 2.5 | 25(746~764MHz) 30(824~849MHz) 26(869~960MHz) 28(1570~1580MHz) 28(1710~1785MHz) 30(1850~1910MHz) 30(1930~1990MHz) 30(2110~2170MHz) 15(3300~3800MHz) 35(4800~5000MHz) 20(7200~7450.5MHz) | 2.0 | 50 | 2.00x1.25x0.45 | D |
| RBBPF2012050AHT | 2.4~2.5 | 2.5max.(typ.2.2) | 25(746~764MHz) 30(824~849MHz) 26(869~960MHz) 28(1570~1580MHz) 28(1710~1785MHz) 30(1850~1910MHz) 30(1930~1990MHz) 25(2110~2170MHz) 15(3300~3800MHz) 35(4800~5000MHz) | 2.0 | 50 | 2.00x1.25x0.45 | D |

2.4GHz BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|------------------|----------------------|-------------------------------------|--|-------------|---------------|----------------|-----------|
| RFBPF2012090ALT | 2.4~2.5 | 1.0max.(25°C) 1.2max.(-40~+85°C) | 28(824~960MHz) 28(1570~1580MHz) 23(1710~1910MHz) 17(1920~1990MHz) 25(4800~5000MHz) | 2.0 | 50 | 2.00x1.25x0.90 | G |
| RFBPF2012090AMT | 2.4~2.5 | 2.6 | 40(880~960MHz) 38(1710~1990MHz) 16(2170MHz) 30(4800~5000MHz) 25(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012100ANT | 2.4~2.5 | 2.3max.(25°C) 2.6max.(-40~+85°C) | 40(699~960MHz) 40(1428~1448MHz) 40(1476~1607MHz) 40(1710~1785MHz) 33(1805~1880MHz) 30(1880~1915MHz) 30(1920~1990MHz) 22(2110~2170MHz) 25(4800~5000MHz) 35(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x1.00 | I |
| RFBPF2012090AQT | 2.4~2.5 | 1.2 | 20(1600MHz) 25(3200MHz) 20(4800~5000MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012090ART | 2.4~2.5 | 1.0 | 20(1600MHz) 25(3200MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012100AVT | 2.4~2.5 | 2.3max.(25°C) 2.6max.(-40~+85°C) | 40(699~960MHz) 40(1428~1448MHz) 40(1476~1607MHz) 40(1710~1785MHz) 33(1805~1880MHz) 30(1880~1915MHz) 30(1920~1990MHz) 25(4800~5000MHz) 30(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x1.00 | I |
| RBBPF2010A108Q1C | 2.4~2.5 | 1.3 | 38(50~960MHz) 17(1710~1910MHz) 5(3200MHz) 30(4800~5000MHz) 25(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.90 | E |
| RFBPF2012090A1T | 2.4~2.5 | 1.7 | 30(900MHz) 20(1850MHz) 30(4800MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012090A2T | 2.4~2.5 | 1.4 | 30(824~960MHz) 30(1710~1910MHz) 20(1920~1990MHz) 6(2110~2170MHz) 20(4800~5000MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012040A3T | 2.4~2.5 | 2.0max.(25°C) 2.2max.(-40~+85°C) | 25(746~764MHz) 30(824~849MHz) 26(869~960MHz) 28(1570~1580MHz) 28(1710~1785MHz) 30(1850~1910MHz) 30(1930~1990MHz) 25(2110~2170MHz) 15(3300~3800MHz) 35(4800~5000MHz) 20(7200~7450.5MHz) | 2.0 | 50 | 2.00x1.25x0.45 | D |
| RFBPF2012080A6T | 2.4~2.5 | 3.5 | 30(880~960MHz) 30(1710~1990MHz) 20(2110~2170MHz) 30(4800~5000MHz) 30(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.80 | C |
| RFBPF2012080A7T | 2.4~2.5 | 2.8 (typ.2.5) | 40(DC~1600MHz) 35(1710MHz) 25(1900MHz) 12(2100MHz) 8(2170MHz) 30(3100MHz) 40(4800~5000MHz) 20(7200~7500MHz) | 2.0 | 50 | 2.00x1.20x0.80 | B |
| RFBPF2012060A9T | 2.4~2.5 | 2.8 | 30(960MHz) 30(1600MHz) 20(1990MHz) 35(3200MHz) 40(4800MHz) 25(7200MHz) | 2.0 | 50 | 2.00x1.20x0.60 | B |

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

2.4GHz BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|-----------------|----------------------|-----------------------------------|---|-------------|---------------|----------------|-----------|
| RFBPF2520090ACT | 2.4~2.5 | 2.1max.(25℃) 2.3max.(-40~+85℃) | 43(806~960MHz) 43(1570~1580 MHz) 43(1710~1990 MHz) 20(2110~2170MHz) 30(4800~5000 MHz) 25(7200~7500MHz) | 2.0 | 50 | 2.50x2.00x0.90 | G |
| RFBPF2520070AMT | 2.4~2.5 | 2.0max.(25℃) 2.2max.(-40~+85℃) | 45(824~960 MHz) 45(1570~1580 MHz) 45(1710~1785 MHz) 40(1805~1850 MHz) 35(1850~1910 MHz) 35(1920~1990 MHz) 25(2110~2170 MHz) 5(2750~3000 MHz) 15(3000~4800 MHz) 30(4800~5000 MHz) 30(5150~5850 MHz) 20(7200~7500 MHz) | 2.0 | 50 | 2.50x2.00x0.70 | A |
| RFBPF2520080AUT | 2.4~2.5 | 2.2 | 30(900 MHz) 30(1850 MHz) 33(2170 MHz) 35(4800 MHz) 25(7200 MHz) | 2.0 | 50 | 2.50x2.00x0.80 | A |
| RFBPF2520120A1T | 2.4~2.5 | 1.7 | 30(900/1850 MHz) 20(2100 MHz) 40(4800 MHz) 25(7200 MHz) | 2.0 | 50 | 2.50x2.00x1.20 | A |
| RFBPF2520120A2T | 2.4~2.5 | 2.1 | 30(900/1850 MHz) 30(4800 MHz) | 2.0 | 50 | 2.50x2.00x1.20 | A |
| RFBPF2520120A3T | 2.4~2.5 | ≤1.2(25℃) | 30(900/1850 MHz) 25(4800 MHz) | 2.0 | 50 | 2.50x2.00x1.20 | A |
| RFBPF2520120A4T | 2.4~2.5 | ≤1.7(25℃) | 30(900/1850 MHz) 25(4800 MHz) | 2.0 | 50 | 2.50x2.00x1.20 | A |
| RFBPF2520100A5T | 2.4~2.5 | 2.0 | 40(900 MHz) 35(3200 MHz) 30(1990 MHz) 20(2100 MHz) 40(4800 MHz) 25(7200 MHz) | 2.0 | 50 | 2.50x2.00x1.00 | A |
| RFBPF2520100A6T | 2.4~2.5 | 1.4 | 35(1900/4800 MHz) | 2.0 | 50 | 2.50x2.00x1.00 | A |
| RFBPF3225150A3T | 2.4~2.5 | 2.5 | 40(1500 MHz) 30(2100 MHz) 30(4800 MHz) | 1.7 | - | 3.20x2.50x1.50 | A |
| RFBPF3225150A4T | 2.4~2.5 | 2.0 | 30(900 MHz) 30(1850 MHz) 20(2100 MHz) 30(4800 MHz) | 2.0 | 50 | 3.20x2.50x1.50 | A |
| RFBPF3225150A5T | 2.4~2.5 | 1.8 | 30(900 MHz) 30(1850MHz) 20(2100 MHz) 30(4800 MHz) | 2.0 | 50 | 3.20x2.50x1.50 | A |

1558 ~ 1606 MHz GNSS Band Applications

| Part Number | Frequency Range (MHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|-----------------|-----------------------|---------------------|--|-------------|---------------|----------------|-----------|
| RFBPF1109060E0T | 1550~1610 | 1.9max. | 25(960MHz) 8(1850MHz) 15(1990MHz) 20(2170MHz) 35(2400~2500MHz) 35(3400~3800MHz) | 2.0 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1411070E0T | 1558~1606 | 1.8max. | 30(824~849 MHz) 30(880~915 MHz) 22(1850~1910 MHz) 22(1920~1980 MHz) 30(2400MHz) | 2.0 | 50 | 1.40x1.10x0.70 | E |

860~960MHz/1805~2025 MHz Band Application

| Part Number | Frequency Range (MHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|--------------------|-----------------------|------------------------------------|---|-------------|---------------|----------------|-----------|
| RFBPF2520090B08Q1C | 869~960 | 0.7max.(25℃) 0.75max.(-40~+85℃) | 25(430~490MHz) 10(1700~1900MHz) 20(2400~2500MHz) 20(4905~5845MHz) | 1.9 | 50 | 2.50x2.00x0.90 | J |
| | 1805~2025 | 1.1max.(25℃) 1.2max.(-40~+85℃) | 25(900~1015MHz) 15(2400~2500MHz) 15(3610~3980MHz) 20(4905~5845MHz) | 2.0 | | | |

5GHz BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|--------------------|----------------------|--|---|-------------|---------------|----------------|-----------|
| RFBPF1608060K2T | 4.9~5.84 | 1.5max.(25°C) 1.7max.(-40~+85°C) | 33(100~2170 MHz) 29(2170~2500 MHz) 32(9800~12000 MHz) | 2.0 | 50 | 1.60x0.80x0.70 | B |
| RFBPF1608060K68Q1C | 4.9~5.9 | 1.3 | 38(30~2700MHz) 16(3453~3547MHz) 33(3667~3883MHz) 9(6900~7093MHz) 32(7333~7750MHz) 40(10600~11650MHz) 18(15540~17760MHz) | 2.0 | 50 | 1.60x0.80x0.60 | D |
| RFBPF1608060K78D1T | 5.15~5.95 | 0.8 | 40(30~2700MHz) 45(3400~3800MHz) 20(7250~7800MHz) 20(10300~11700MHz) | 1.67 | 50 | 1.60x0.80x0.60 | D |
| RFBPF1608060K88Q1C | 5.15~5.95 | 0.7 (typ.0.6) | 35(30~2700MHz) 30(3400~3800MHz) 12(7250~7800MHz) 20(10300~11700MHz) | 1.5 | 50 | 1.60x0.80x0.60 | D |
| RFBPF1608060KG8D1T | 5.15~5.95 | 0.8 | 40(30~2700MHz) 45(3400~3800MHz) 20(6900MHz) 20(7250~7800MHz) 20(10300~11700MHz) | 1.67 | 50 | 1.60x0.80x0.60 | D |
| RFBPF2012100KST | 4.9~5.9 | 1.5(4.90GHz) 1.5(5.25GHz) 1.5(5.85GHz) | 30(3450 MHz) 20(11000 MHz) | 2.0 | 50 | 2.00x1.20x1.00 | B |
| RFBPF2012100K0T | 4.9~5.9 | 1.7(4.90GHz) 1.5(5.25GHz) 1.5(5.85GHz) | 30(3450 MHz) 20(11000 MHz) | 2.0 | 50 | 2.00x1.20x1.00 | B |
| RFBPF2012100K1T | 5.15~5.9 | 3.0 (typ.2.5) | 35(4000MHz) 35(4500MHz) 40(4600MHz) | 2.0 | 50 | 2.00x1.20x1.00 | B |
| RFBPF2012090K5T | 4.9~5.85 | 2.2 | 35(340~1195 MHz) 19(2140~3580 MHz) 25(6855~7150 MHz) 20(8570~8930 MHz) | 2.0 | 50 | 2.00x1.20x0.90 | B |
| RFBPF2012100K3T | 4.9~5.85 | 1.8max.(25°C) 2.1max.(-40~+85°C) | 30(500 MHz) 35(3450 MHz) 30(4000 MHz) 20(4200 MHz) 15(9800 MHz) 15(11700 MHz) | 2.0 | 50 | 2.00x1.20x0.95 | B |
| RFBPF2012100K6T | 5.15~5.85 | 1.6max.(25°C) 1.8max.(-40~+85°C) | 30(500 MHz) 40(2000 MHz) 35(3450 MHz) 30(4000 MHz) 20(4200 MHz) | 2.0 | 50 | 2.00x1.20x0.95 | B |
| RFBPF2012090K9T | 5.725~5.85 | 2.0 | 30(500 MHz) 30(4000 MHz) 20(4200 MHz) 32(5000 MHz) 15(9800 MHz) 15(11750 MHz) | 2.0 | 50 | 2.00x1.20x0.95 | B |
| RFBPF2520090K1T | 4.9~5.85 | 1.2 | 47(824 MHz) 47(1500 MHz) 47(1910 MHz) 15(9800 MHz) | 2.0 | 50 | 2.50x2.00x0.90 | A |

WiMAX BAND WORKING FREQUENCY

| Part Number | Frequency Range(GHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|-----------------|----------------------|---------------------|--|-------------|---------------|----------------|-----------|
| RFBPF16082G3W0T | 2.3~2.39 | 2.0 | 29(880~915 MHz) 29(1710~1785 MHz) 21(1850~1910 MHz) 15(1920~1980 MHz) 18(4600~4780 MHz) 23(6900~7170 MHz) | 2.0 | 50 | 1.60x0.80x0.70 | B |

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

MoCA / Docsis Application

| Part Number | Frequency Range(MHz) | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|--------------------|----------------------|-------------------------------------|---|-------------|---------------|----------------|-----------|
| RFBPF3225180Y1T | 975~1025 | 3.0 | 30(54~870 MHz) 30(1125~1675 MHz) 30(2300 MHz) | 2.0 | 75 | 3.20x2.50x1.80 | K |
| RFBPF3225200Y07B1U | 475~675 | 2.5max.(25°C) 2.7max.(-40~+85°C) | 60(2.5 MHz) 40(2.5~100 MHz) 35(100~200 MHz) 35(200~300 MHz) 8(300~400 MHz) 57(950 MHz) 47(950~2025 MHz) 41(2025~2500 MHz) 35(2500~3000 MHz) | 2.0 | 75 | 3.20x2.50x1.80 | K |
| RBBPF3225180Y27B1U | 400~700 | 2.0 | 42(1~200 MHz) 30(950~2150 MHz) 35(2150~3000 MHz) 27(3000~5900 MHz) | 2.0 | 50 | 3.20x2.50x1.80 | K |
| RFBPF3225180C07B1U | 1125~1675 | 1.8max.(25°C) 2.0max.(-40~+85°C) | 30(5~864 MHz) 34(864~1002 MHz) 32(2300~3000 MHz) | 2.0 | 75 | 3.20x2.50x1.80 | K |
| RBBPF3225180C67B1U | 1125~1675 | 2.0 | 40(1~900 MHz) 25(900~1002 MHz) 35(2000~2500 MHz) 27(2500~5900 MHz) | 2.0 | 50 | 3.20x2.50x1.80 | K |
| RBBPF3225180C77B1U | 1125~1225 | 2.0 | 33(1~900 MHz) 25(900~1002 MHz) 25(1350~1675 MHz) 35(2000~2500 MHz) 27(2500~5900 MHz) | 2.0 | 50 | 3.20x2.50x1.80 | K |

LTE Band Application

| Part Number | Frequency Range(MHz) | Band | Insertion Loss (dB) | Attenuation (dB min.) | VSWR (max.) | Impedance (Ω) | Size(mm) | STRUCTURE |
|----------------|----------------------|------|---------------------|-------------------------|-------------|---------------|----------------|-----------|
| RFBPF1109B101T | 2110~2170 | B1 | 1.7 | 25(4280MHz) | 2 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1109B201T | 1930~1990 | B2 | 1.7 | 25(3920MHz) | 2 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1109B301T | 1805~1880 | B3 | 1.4 | 25(3685MHz) | 2 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1109B501T | 869~894 | B5 | 0.9 | 12(1763MHz) | 2 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1109B701T | 2620~2690 | B7 | 1.2 | 25(5310MHz) | 2 | 50 | 1.10x0.90x0.60 | E |
| RFBPF1109B801T | 925~960 | B8 | 0.9 | 12(1885MHz) | 2 | 50 | 1.10x0.90x0.60 | E |

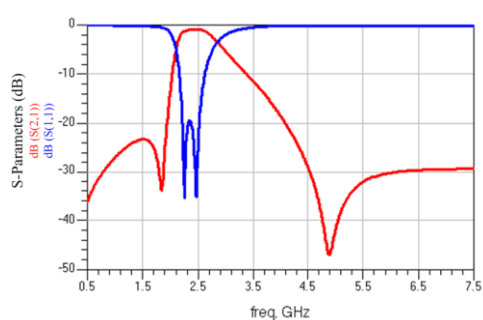
■ TYPICAL ELECTRICAL CHARACTERISTICS



RFBPF1411060A2T



RBBPF1411060A3T



RFBPF1608060AA7M1U



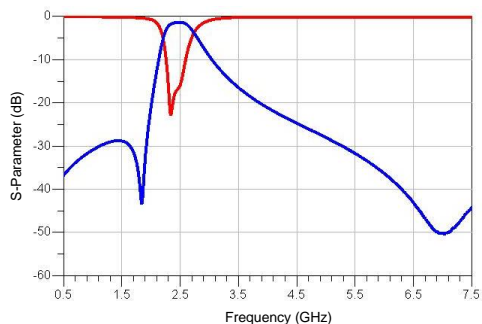
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RFBPF1608060AET



RFBPF1608070AFT



RFBPF1608070AWT



RFBPF1608050A0T



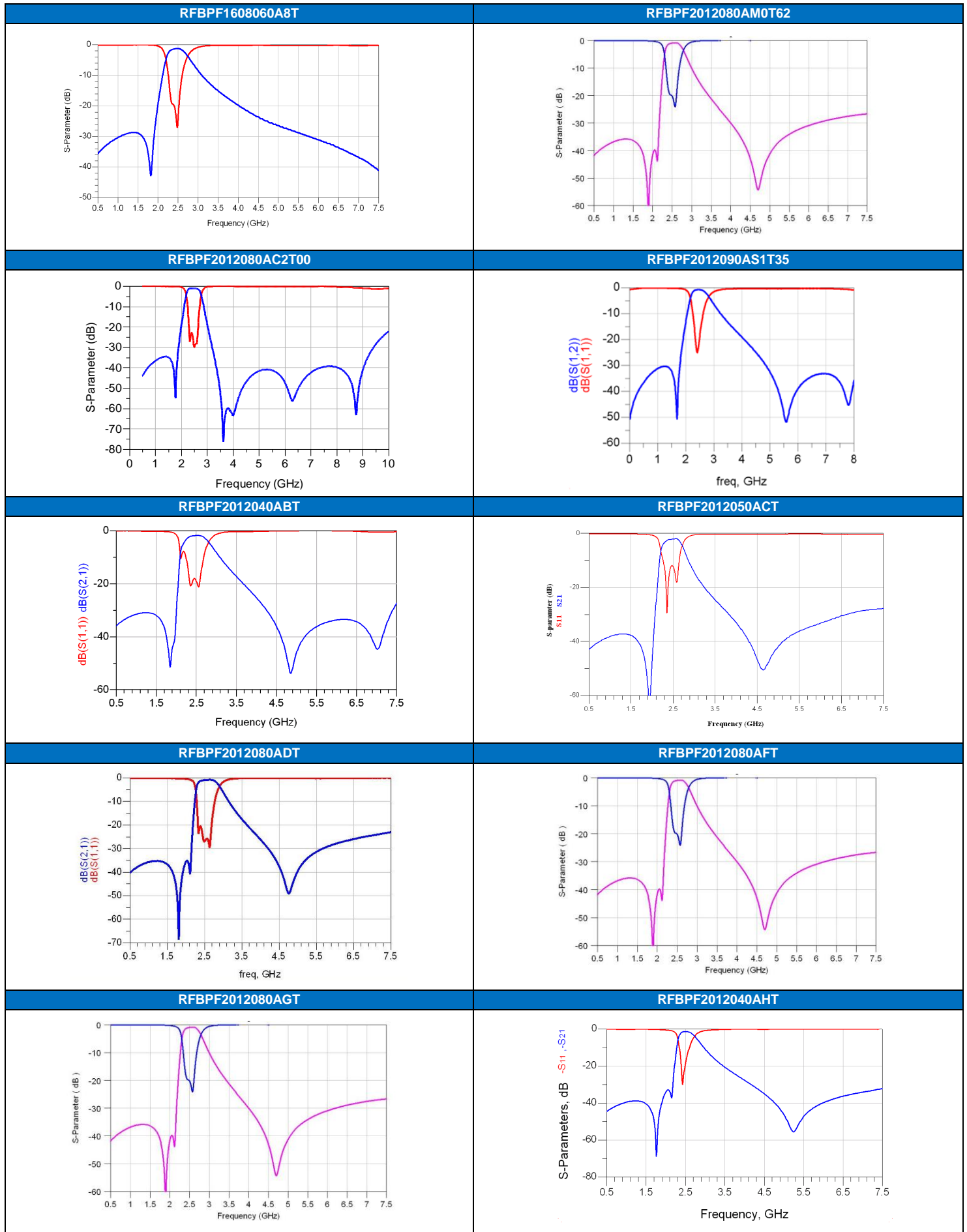
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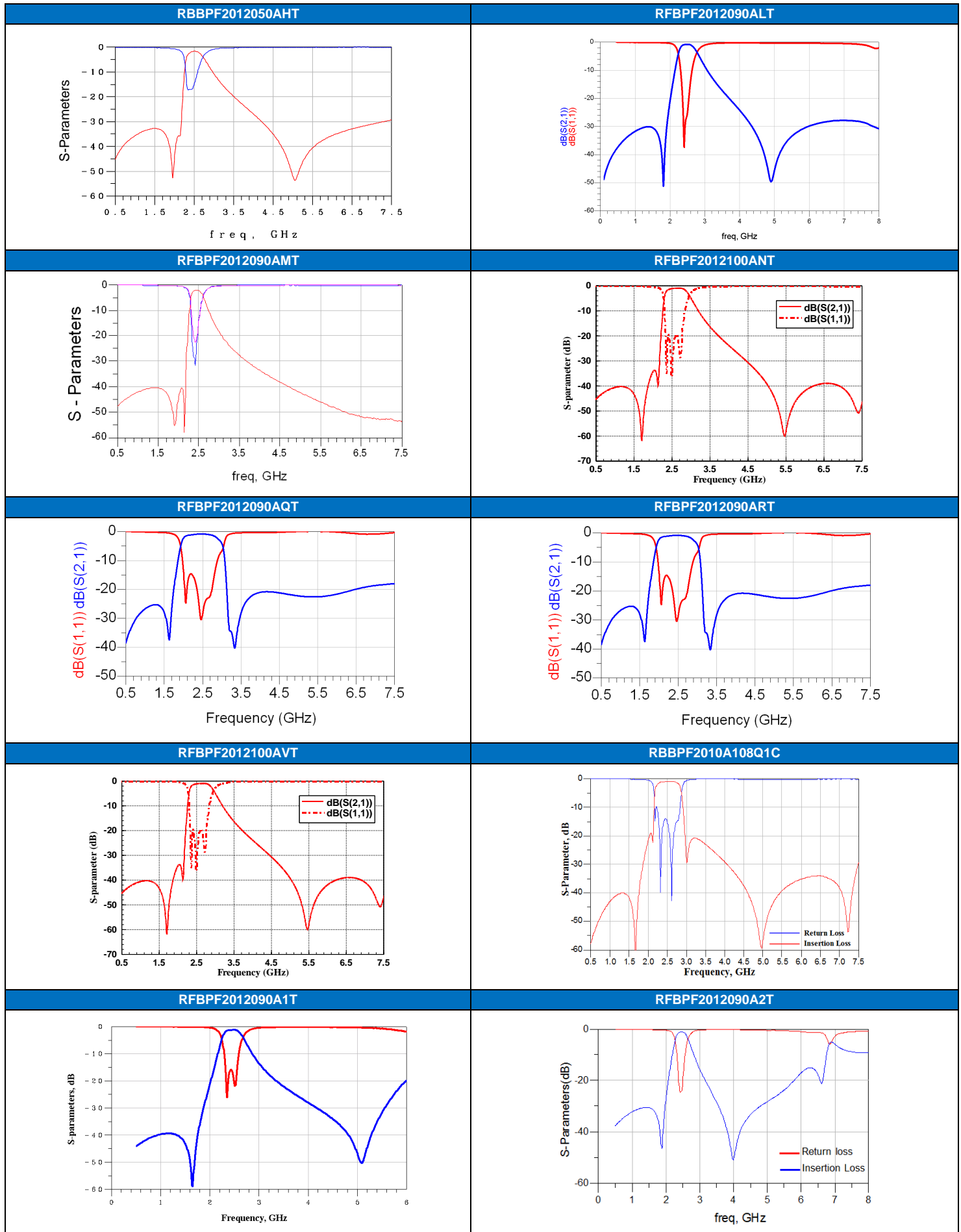


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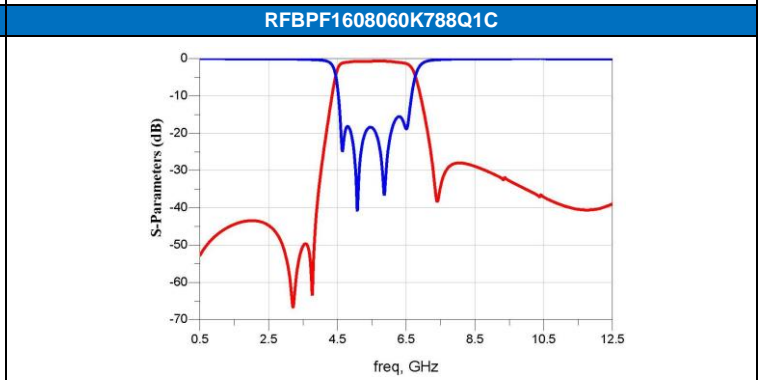
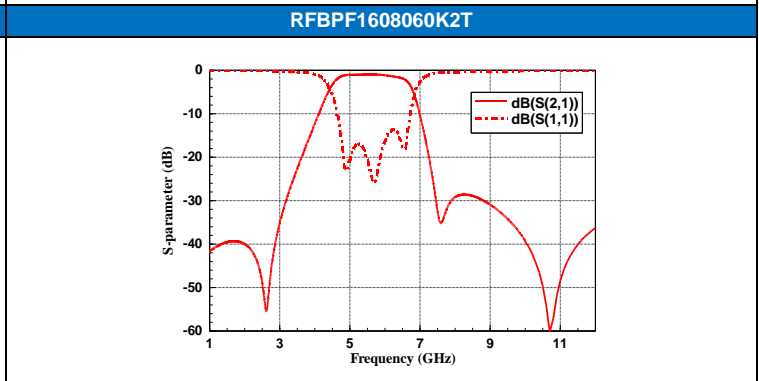
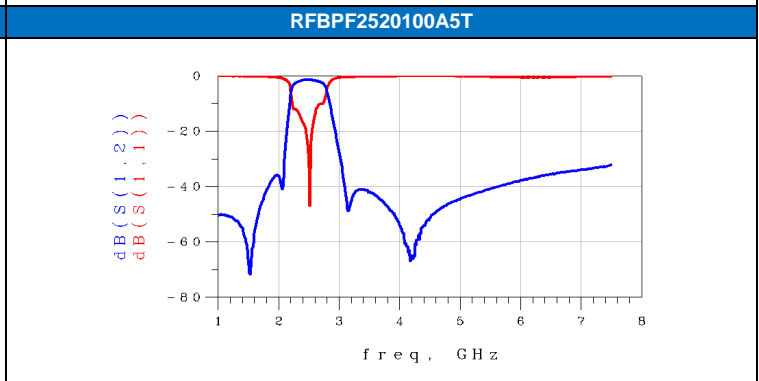
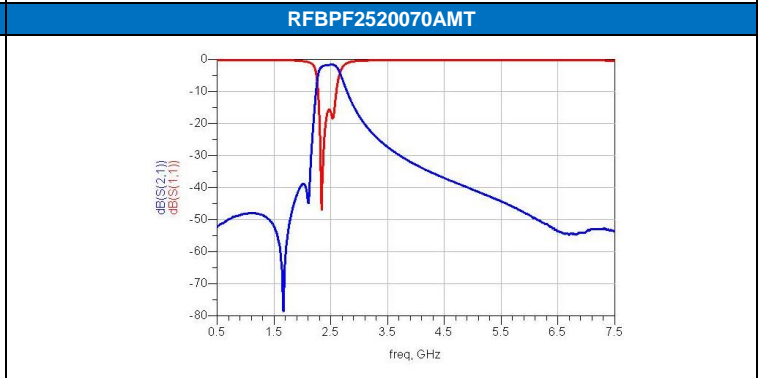
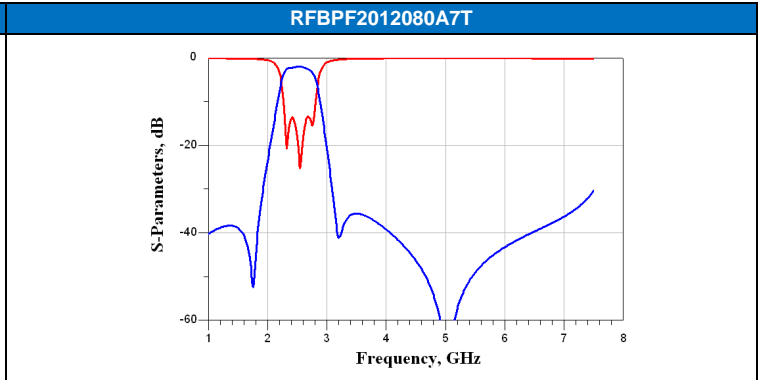


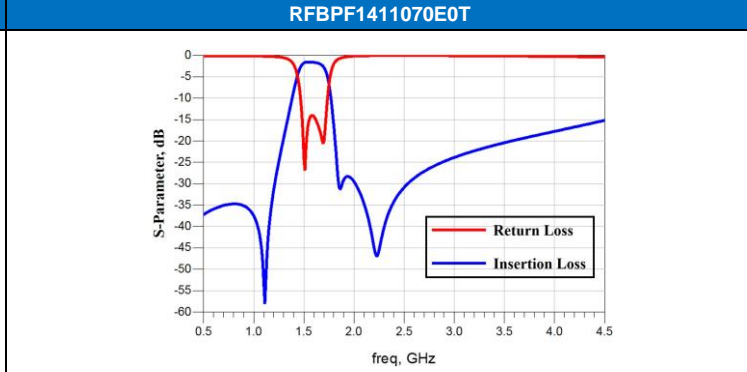
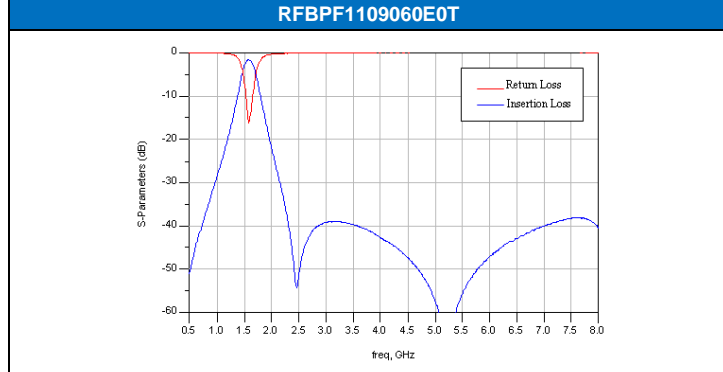
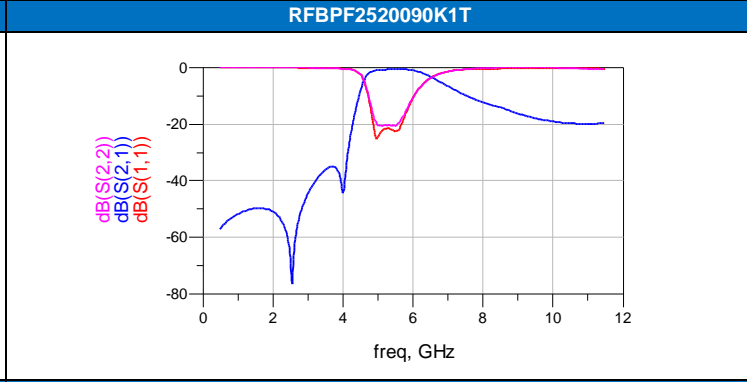
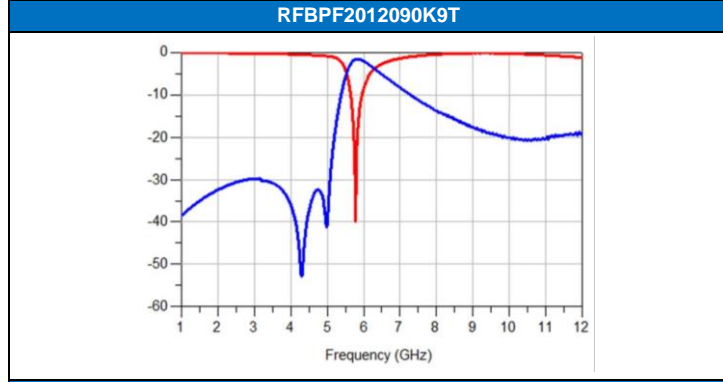
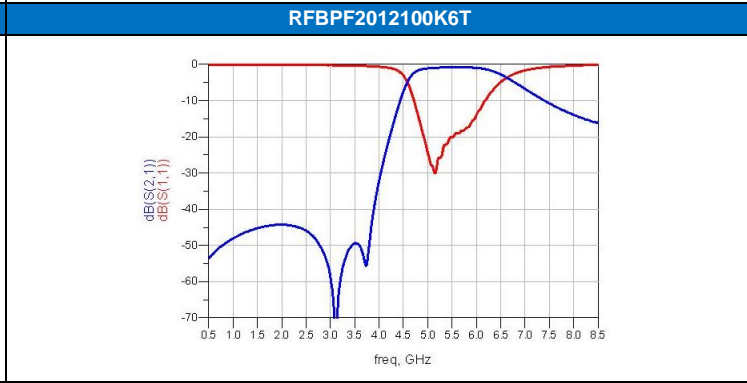
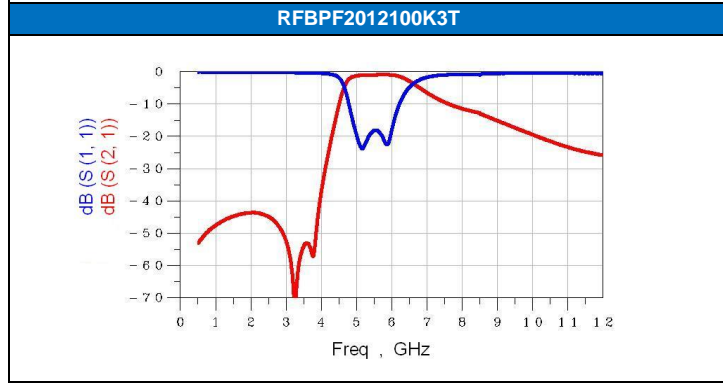
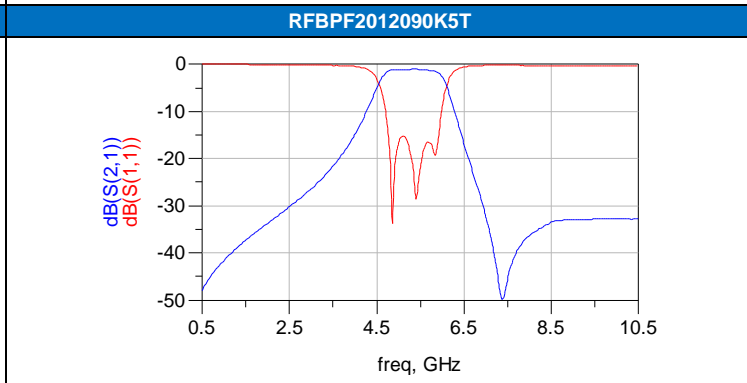
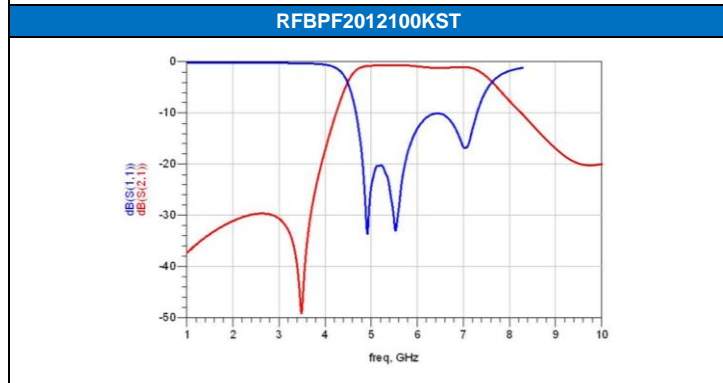
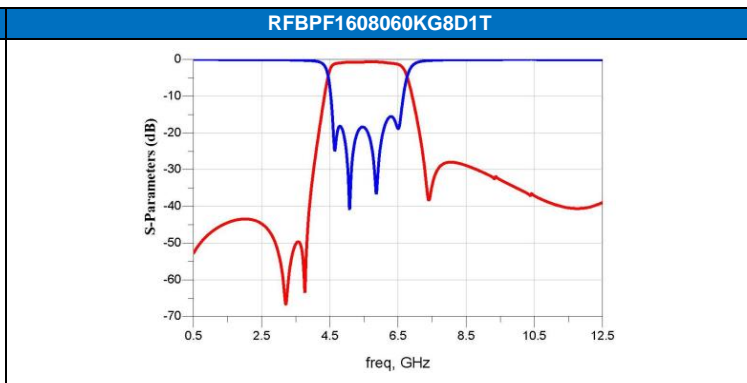
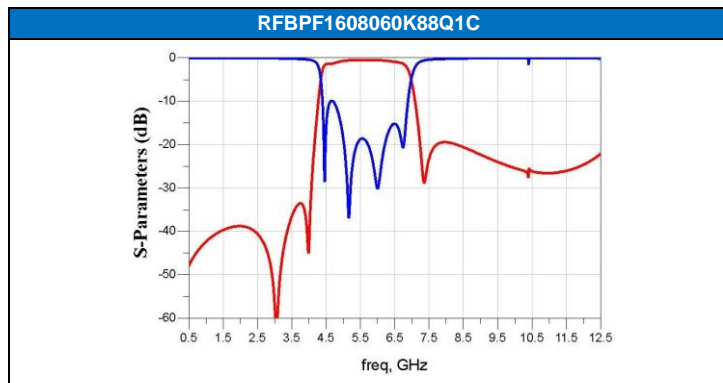
HIGH FREQUENCY MULTILAYER BAND PASS FILTER





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RFBPF2520090B08Q1C

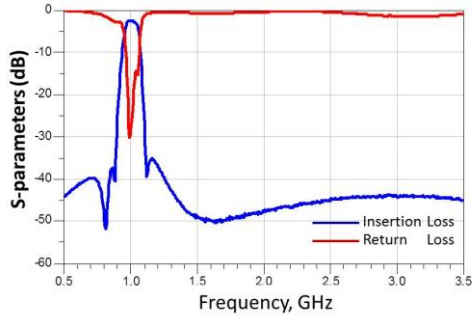
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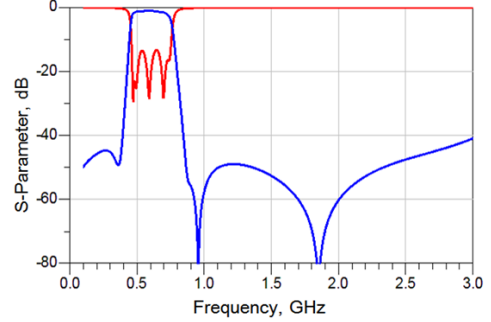
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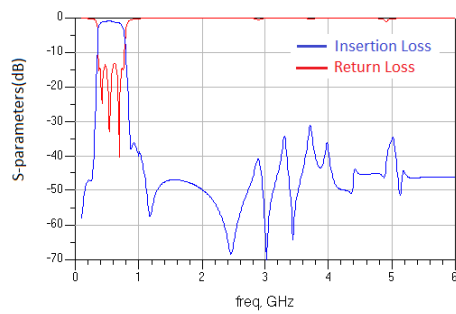
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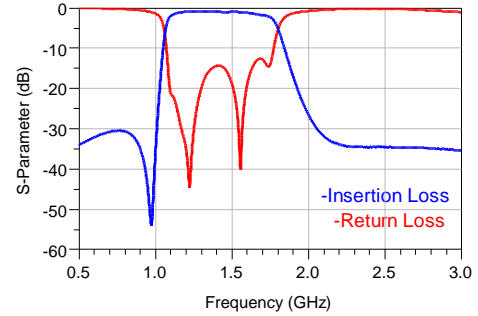
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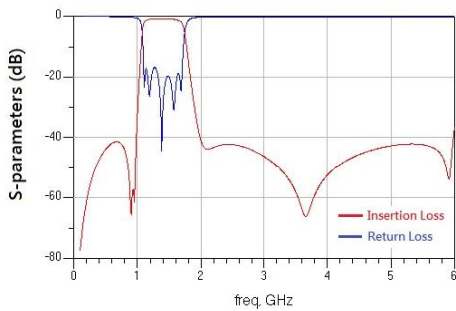
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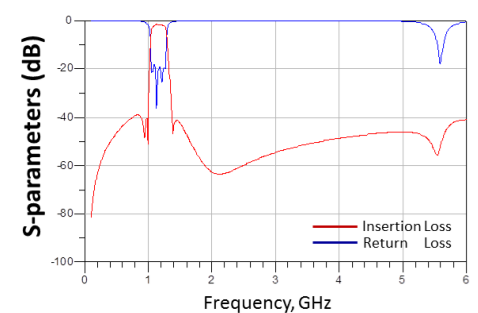
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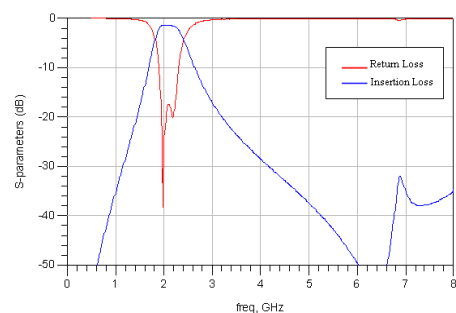
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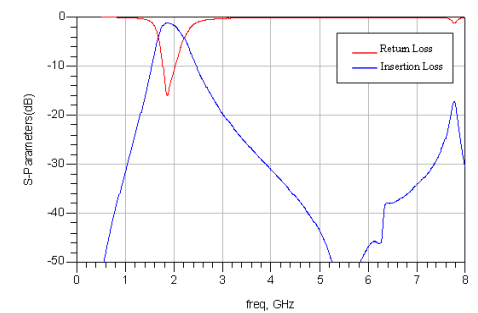
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RFBPF1109B101T



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HIGH FREQUENCY MULTILAYER BALANCED FILTER

■ STRUCTURE AND PIN ASSOCIATED



■ STRUCTURE AND DIMENSION

Unit: mm

| Structure/ Dimension | L | W | T | A | B | C | D | E | F | G |
|-------------------------|-----------|-----------|-----------|------------|-----------|-----------|---------------|---------------|-----------|-----------|
| A | 1.60±0.15 | 0.80±0.15 | 0.60±0.10 | 0.175±0.15 | 0.25±0.15 | 0.25±0.15 | 0.50±0.15 | 0.20±0.15 | 0.20±0.15 | 0.30±0.15 |
| | 2.00±0.15 | 1.25±0.15 | 0.40±0.10 | 0.175±0.10 | 0.35±0.15 | 0.30±0.15 | 0.65±0.10 | 0.20±0.10 | 0.20±0.15 | 0.50±0.10 |
| | | | 0.50±0.10 | 0.20±0.15 | 0.30±0.15 | 0.35±0.15 | 0.65±0.15 | 0.20±0.15 | 0.20±0.15 | 0.30±0.15 |
| | | | 0.60±0.10 | 0.20±0.15 | 0.30±0.10 | 0.35±0.10 | 0.65±0.10 | 0.20±0.15 | 0.20±0.15 | 0.50±0.10 |
| | | | 0.90±0.10 | 0.20±0.15 | 0.30±0.10 | 0.35±0.10 | 0.65±0.10 | 0.20±0.15 | 0.20±0.15 | 0.30±0.10 |
| | | | 1.00±0.10 | 0.20±0.15 | 0.30±0.10 | 0.35±0.10 | 0.65±0.10 | 0.20±0.10 | 0.20±0.15 | 0.50±0.10 |
| | | | 1.10±0.10 | 0.20±0.15 | 0.30±0.10 | 0.35±0.10 | 0.65±0.10 | 0.20±0.15 | 0.20±0.15 | 0.55±0.10 |
| | 0.50±0.10 | 0.35±0.10 | 0.65±0.10 | 0.20±0.15 | 0.20±0.15 | 0.50±0.10 | | | | |
| 2.50±0.20 | 2.00±0.20 | 0.85±0.10 | 0.35±0.20 | 0.40±0.10 | 0.30±0.10 | 0.70±0.20 | 0.15(Typical) | 0.15(Typical) | 1.20±0.20 | |
| B | 2.00±0.15 | 1.25±0.10 | 0.60±0.10 | 0.20±0.10 | 0.30±0.15 | 0.25±0.15 | 0.65±0.10 | 0.25±0.10 | - | - |

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