

Dielectric Filters (GIGAFIL®)

muRata

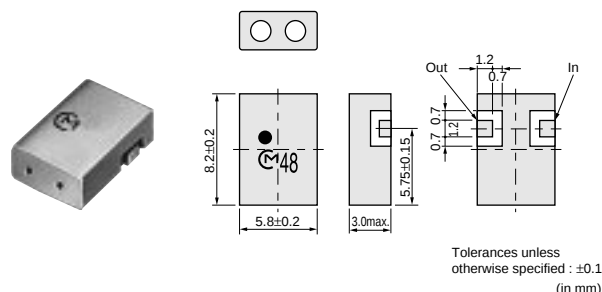
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Band Pass Filters

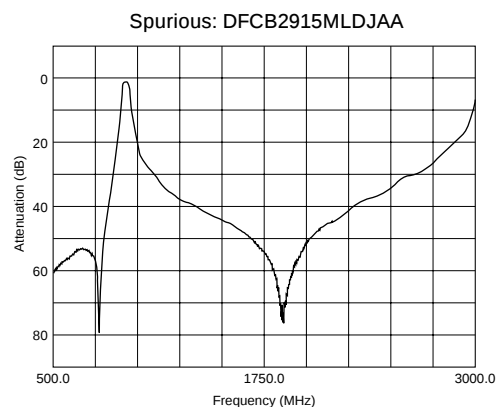
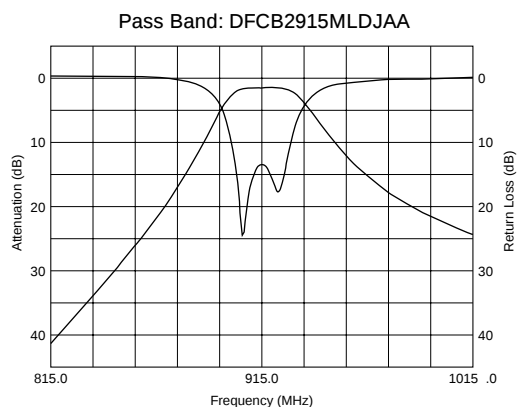
DFCB Series 800/900MHz

■ Features

1. Low insertion loss for using high Q-value dielectric resonators
2. Small and light for using high dielectric constant ceramics
3. Excellent temperature stability for temperature compensated dielectric constant (0+/-5 ppm/degree C max.)
4. Excellent mechanical stability without vibratile structure
5. SMD and reflow soldering available
6. Mountable by automatic placement machine



■ Characteristics



Application	Part Number	f _o (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
AMPS	DFCB2836MLDJAA	836.5	25	2.6	6.5 (869 to 894MHz)	-30 to +85
CT2	DFCB2841MLEJAA	841	4	3.0	38 (Fo-150MHz)	-30 to +85
CT2	DFCB2866MLEJAA	866	4	3.0	38 (Fo-150MHz)	-30 to +85
AMPS	DFCB2881MLDJAA	881.5	25	2.6	9 (824 to 849MHz)	-30 to +85
CT1+	DFCB2886MLEJAA	886	2	3.0	24 (Fo-44MHz)	-30 to +85
GSM	DFCB2902MLDJAA	902.5	25	2.6	27 (Fo-77.5MHz)	-30 to +85
WLAN915	DFCB2903MLEJAA	903	2	3.0	20 (Fo+22MHz)	-30 to +85
CT2	DFCB2912MLDJAA	912	4	2.0	50 (Fo-150MHz)	-30 to +85
CT2	DFCB2912MLEJAA	912	4	3.0	38 (Fo-150MHz)	-30 to +85
CT1	DFCB2914MLEJAA	914.5	1	3.0	24 (Fo-44MHz)	-30 to +85
WLAN915	DFCB2915MLDJAA	915	26	2.5	27 (837.5MHz)	-35 to +85
WLAN915	DFCB2926MLEJAA	926.25	2.7	2.8	21 (902.4 to 905.1MHz)	-30 to +85
WLAN915	DFCB2927MLEJAA	927	2	3.0	15 (Fo-22MHz)	-30 to +85
CT1+	DFCB2931MLEJAA	931	2	3.0	24 (Fo-44MHz)	-30 to +85
GSM	DFCB2947MLDJAA	947.5	25	2.6	27 (Fo-77.5MHz)	-30 to +85
CT1	DFCB2959MLEJAA	959.5	1	3.0	30 (Fo+44MHz)	-30 to +85
LMR	DFCB3815MLDJAA	815.5	19	2.5	12 (Fo±35.5MHz)	-30 to +85
AMPS	DFCB3836MLDJAA	836.5	25	3.0	12 (869 to 894MHz)	-30 to +85
CT2	DFCB3841MLEJAA	841	4	5.3	60 (Fo-150MHz)	-30 to +85
LMR	DFCB3860MLDJAA	860.5	19	2.5	13 (Fo-35.5MHz)	-30 to +85

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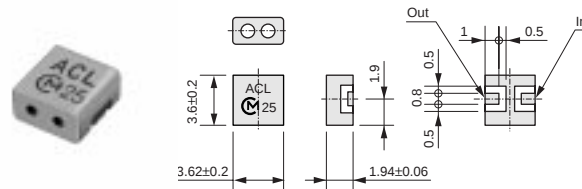
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Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
CT2	DFCB3866MLEJAA	866	4	5.3	60 (Fo-150MHz)	-30 to +85
AMPS	DFCB3881MLDJAA	881.5	25	3.0	15 (824 to 849MHz)	-30 to +85
CT1+	DFCB3886MLEJAA	886	2	5.3	45 (Fo-44MHz)	-30 to +85
GSM	DFCB3902MLDJAA	902.5	25	3.0	45 (Fo-77.5MHz)	-30 to +85
WLAN915	DFCB3903MLEJAA	903	2	5.3	29 (Fo-22MHz)	-30 to +85
CT2	DFCB3912MLEJAA	912	4	5.3	60 (Fo-150MHz)	-30 to +85
CT1	DFCB3914MLEJAA	914.5	1	5.3	45 (Fo-44MHz)	-30 to +85
WLAN915	DFCB3915MLDJAA	915	26	3.0	15 (Fo-32.5MHz)	-30 to +85
WLAN915	DFCB3927MLEJAA	927	2	5.3	29 (Fo-22MHz)	-30 to +85
CT1+	DFCB3931MLEJAA	931	2	5.3	45 (Fo-44MHz)	-30 to +85
GSM	DFCB3947MLDJAA	947.5	25	3.0	45 (Fo-77.5MHz)	-30 to +85
CT1	DFCB3959MLEJAA	959.5	1	5.3	45 (Fo-44MHz)	-30 to +85

DFCB Series 1.5-5GHz

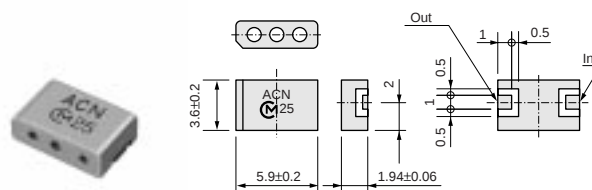
■ Features

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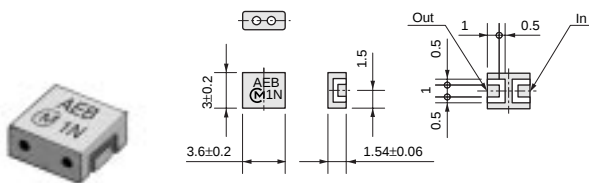
DFCB22G33LBJAA

Tolerances unless
otherwise specified : ±0.1
(in mm)



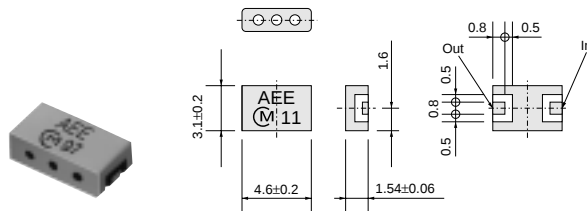
DFCB32G33LBJAA

Tolerances unless
otherwise specified : ±0.1
(in mm)



DFCB25G25LAHAA

Tolerances unless
otherwise specified : ±0.1
(in mm)

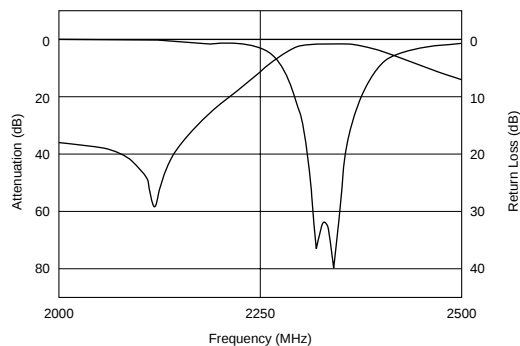


DFCB35G25LAHAA

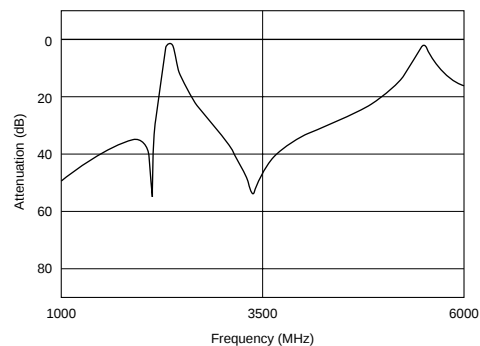
Tolerances unless
otherwise specified : ±0.1
(in mm)

■ Characteristics

Pass Band: DFCB22G33LBJAA



Spurious: DFCB22G33LBJAA

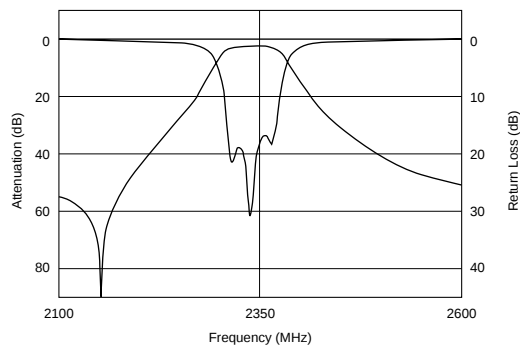


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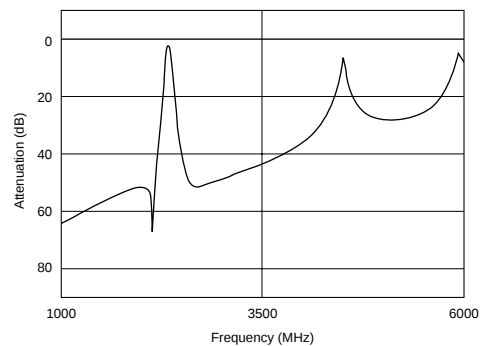
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Characteristics

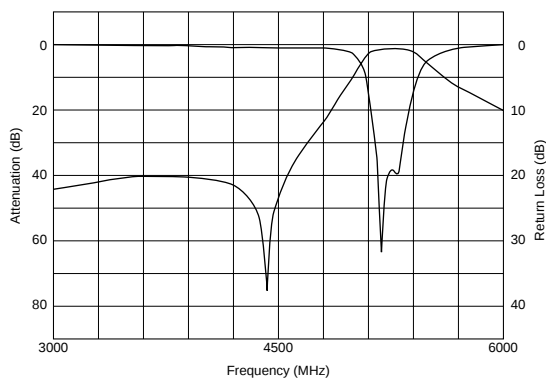
Pass Band: DFCB32G33LBJAA



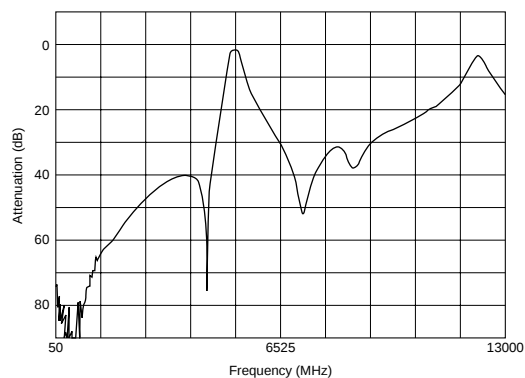
Spurious: DFCB32G33LBJAA



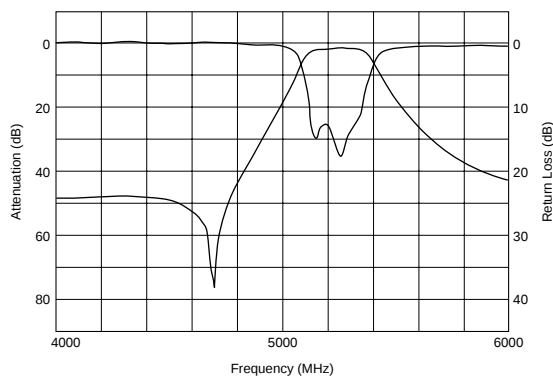
Pass Band: DFCB25G25LAHAA



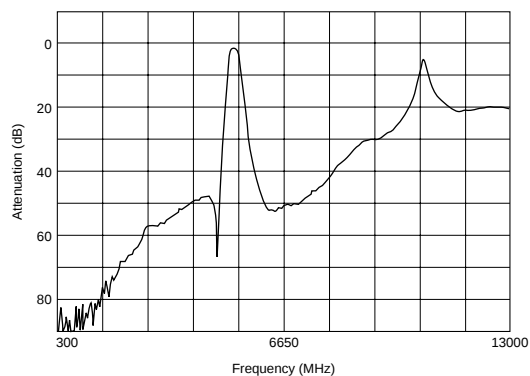
Spurious: DFCB25G25LAHAA



Pass Band: DFCB35G25LAHAA



Spurious: DFCB35G25LAHAA



Application	Part Number	f _o (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
DAB	DFCB21G47LBJAA	1472	40	2.0	38 (1122MHz)	-30 to +85
PDC1.5	DFCB21G48LBJAA	1489	24	1.4	10 (1607 to 1631MHz)	-30 to +85
GPS	DFCB21G57LBJAB	1575.42	3	1.3	37 (1850 to 1910MHz)	-35 to +85
GPS	DFCB21G57LCJAA	1575.42	2	3.5	15 (Fo±50MHz)	-30 to +85
GPS	DFCB21G57LDJAB	1575.42	2	3.15	18 (Fo±50MHz)	-30 to +85
DCS1800	DFCB21G84LDJAA	1842.5	75	2.0	20 (Fo-160MHz)	-35 to +85
PCS1.9	DFCB21G88LDJAA	1880	60	1.5	17 (2280MHz)	-30 to +85
DECT	DFCB21G89LBJAA	1890	20	2.0	40 (1660 to 1680MHz)	-30 to +85
DECT	DFCB21G89LBJAB	1890	20	1.7	35 (1660 to 1680MHz)	-30 to +85
DECT	DFCB21G89LDHAA	1890	20	0.9	27 (1655 to 1679MHz)	-10 to +55
DECT	DFCB21G89LDJAA	1890	20	2.0	45 (1660 to 1680MHz)	-30 to +85
PHS	DFCB21G90LBJAA	1907.5	25	1.0	20 (1655 to 1680MHz)	-15 to +55

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Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
PHS	DFCB21G90LBJAB	1907.5	25	1.6	35 (1655 to 1680MHz)	-15 to +55
PHS	DFCB21G90LBJAC	1907.5	25	1.9	45 (1655 to 1680MHz)	-15 to +55
DECT (CHINA)	DFCB21G91LBJAA	1910	20	1.7	34 (1675 to 1700MHz)	-30 to +85
DECT (CHINA)	DFCB21G91LDJAA	1910	20	1.8	40 (1675 to 1700MHz)	-30 to +85
CDMA1.9	DFCB21G92LBJAA	1920	20	1.2	20 (1655 to 1694MHz)	-30 to +85
CDMA1.9	DFCB21G92LDJAA	1920	20	1.9	16 (1800 to 1820MHz)	-30 to +85
PCS1.9	DFCB21G96LDJAA	1960	60	1.5	17 (2360MHz)	-30 to +85
TD-SCDMA	DFCB22G01LBJAA	2017.5	15	1.5	35 (1270MHz)	-35 to +85
W-CDMA	DFCB22G14LBJAA	2140	60	2.7	26 (1920 to 1980MHz)	-30 to +85
Sirius Radio	DFCB22G32LBJAA	2326	14	1.8	8.5 (2227MHz)	-35 to +85
XM Satellite	DFCB22G33LBJAA	2339	14	1.8	8.5 (2240MHz)	-35 to +85
WLAN2.4	DFCB22G44LANAA	2441.5	83	1.5	35 (2000MHz)	-35 to +85
WLAN2.4	DFCB22G44LBJAA	2442	84	2.0	16 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCB22G45LBJAA	2450	100	2.0	15 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCB22G48LBJAA	2484	26	2.0	27.5 (Fo-204MHz)	-30 to +85
VICS	DFCB22G50LBJAA	2500	4	4.5	20 (2440MHz)	-30 to +85
WLAN5G	DFCB25G25LAHAA	5250	200	1.5	38 (4370 to 4510MHz)	-35 to +85
WLAN5G	DFCB25G59LAHAA	5597.5	255	1.5	11 (Fo-375MHz)	-35 to +85
WLAN5G	DFCB25G77LAHAA	5775	100	1.5	12 (Fo-375MHz)	-35 to +85
ETC	DFCB25G80LBHAA	5800	100	2.0	25 (Fo-375MHz)	-30 to +85
DAB	DFCB31G47LBJAA	1472	40	3.0	45 (1100MHz)	-35 to +85
DCS1800	DFCB31G74LBJAA	1747.5	75	3.5	45 (1464 to 1539MHz)	-30 to +85
DCS1800	DFCB31G84LBJAA	1842.5	75	3.5	45 (1559 to 1634MHz)	-30 to +85
DCS1800	DFCB31G84LBJAB	1842.5	75	2.75	45 (0.3 to 1388MHz)	-30 to +85
PCS1.9	DFCB31G88LBJAA	1880	60	3.7	5 (1930MHz)	-30 to +85
PCS1.9	DFCB31G88LBJAB	1880	60	4.0	41 (2043 to 2103MHz)	-30 to +85
W-CDMA	DFCB31G95LBJAA	1950	60	3.5	35 (2110 to 2170MHz)	-30 to +85
PCS1.9	DFCB31G96LBJAA	1960	60	3.7	5 (1910MHz)	-30 to +85
PCS1.9	DFCB31G96LBJAB	1960	60	3.0	10 (1498 to 1860MHz)	-30 to +85
PCS1.9	DFCB31G96LBJAC	1960	60	2.8	10 (1860MHz)	-30 to +85
PCS1.9	DFCB31G96LBJAE	1960	60	3.7	20 (2065 to 2125MHz)	-35 to +85
W-CDMA	DFCB32G14LBJAA	2140	60	3.7	30 (1920 to 1980MHz)	-30 to +85
Sirius Radio	DFCB32G32LBJAA	2326	14	3.0	24 (2227MHz)	-35 to +85
XM Satellite	DFCB32G33LBJAA	2339	14	3.0	24 (2240MHz)	-35 to +85
WLAN2.4	DFCB32G44LBJAA	2442	84	3.2	30 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCB32G45LBJAA	2450	100	3.2	30 (Fo-250MHz)	-30 to +85
WLAN5G	DFCB35G25LAHAA	5250	200	3.3	45 (4450 to 4650MHz)	-35 to +85
WLAN5G	DFCB35G59LAHAA	5597.5	255	3.6	45 (4750 to 5000MHz)	-35 to +85
WLAN5G	DFCB35G77LAHAA	5775	100	3.0	30 (Fo-375MHz)	-35 to +85
WLAN5G	DFCB35G80LBHAA	5800	150	3.4	10 (Fo-175MHz)	-35 to +85

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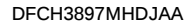


Figure 1 is a line graph showing the attenuation of a 100-MHz signal as a function of frequency. The x-axis is labeled "Frequency (MHz)" and ranges from 500.0 to 3000.0 with major grid lines every 500.0 MHz. The y-axis is labeled "Attenuation (dB)" and ranges from 0 to 80 with major grid lines every 20 dB. The curve starts at approximately 65 dB at 500 MHz, rises to a sharp peak of 0 dB at 1000 MHz, then drops to a minimum of about 75 dB at 1100 MHz. It then rises to a broad peak of about 10 dB at 2500 MHz, before decreasing to approximately 25 dB at 3000 MHz.

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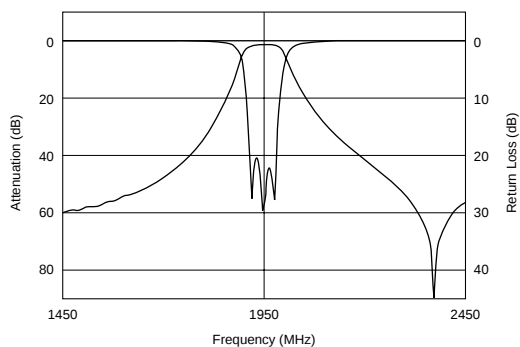
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Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
EGSM	DFCH4897MHDJAA	897.5	35	4.6	13 (Fo±27.5MHz)	-30 to +85
ETACS	DFCH4933MHDJAA	933.5	33	4.6	15 (Fo±28.5MHz)	-30 to +85
EGSM	DFCH4942MHDJAA	942.5	35	4.6	13 (Fo±27.5MHz)	-30 to +85

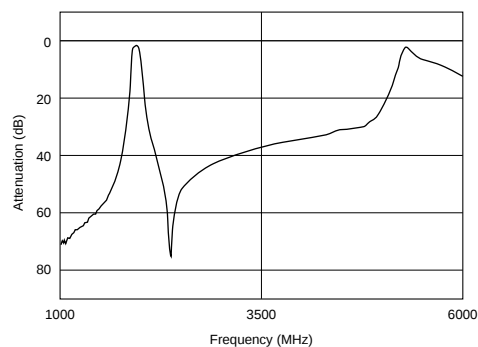
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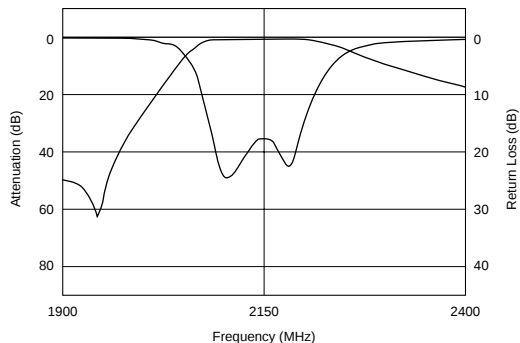
Pass Band: DFCH31G95HDHAA



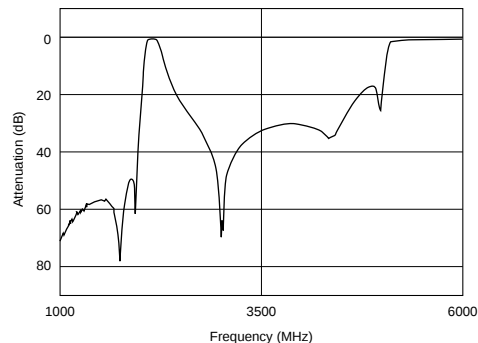
Spurious: DFCH31G95HDHAA



Pass Band: DFCH32G14HDHA



Spurious: DFCH32G14HDHA



Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temp. (°C)
GPS	DFCH21G57HDHAA	1575.5	2	0.9	16 (Fo-140MHz)	-30 to +85
PHS	DFCH21G90HDJAA	1907.5	25	0.7	35 (Fo-227.5MHz)	-30 to +85
WLAN2.4	DFCH22G44HDHAA	2442	84	1.2	15 (Fo±250MHz)	-30 to +85
WLAN2.4	DFCH22G45HDHAA	2450	100	1.0	16 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCH22G48HDHAA	2484	26	2.5	47 (Fo-270MHz)	-30 to +85
VICS	DFCH22G50HDHAA	2500	4	2.4	10 (Fo±60MHz)	-30 to +85
MSAT	DFCH31G54HDJAA	1542	34	3.0	30 (1626.5 to 1660.5MHz)	-30 to +85
MSAT	DFCH31G64HDJAA	1643.5	34	3.0	30 (1525 to 1559MHz)	-30 to +85
DCS1800	DFCH31G74HDJAA	1747.5	75	2.0	8 (Fo±80MHz)	-30 to +85
DCS1800	DFCH31G84HDJAA	1842.5	75	2.0	8 (Fo±80MHz)	-30 to +85
PCS1.9	DFCH31G88HDJAA	1880	60	2.2	15 (Fo±100MHz)	-30 to +85
W-CDMA	DFCH31G95HDHAA	1950	60	1.8	45 (1550MHz)	-30 to +85
PCS1.9	DFCH31G96HDJAA	1960	60	2.2	15 (Fo±100MHz)	-30 to +85
W-CDMA	DFCH32G14HDHAA	2140	60	1.3	52 (1325 to 1385MHz)	-30 to +85
MMDS	DFCH32G15HDHAB	2156	20	3.0	36 (2050MHz)	-35 to +85
WLAN2.4	DFCH32G44HDHAA	2442	84	2.4	36 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCH32G45HDHAA	2450	100	2.3	36 (Fo-250MHz)	-30 to +85
WLAN2.4	DFCH32G48HDHAA	2484	26	3.0	45 (Fo-270MHz)	-30 to +85
DCS1800	DFCH41G74HDJAA	1747.5	75	3.6	10 (Fo±57.5MHz)	-30 to +85
DCS1800	DFCH41G84HDJAA	1842.5	75	3.6	10 (Fo±57.5MHz)	-30 to +85
PCS1.9	DFCH41G88HDJAA	1880	60	4.5	12 (Fo±50MHz)	-30 to +85
PCS1.9	DFCH41G96HDJAA	1960	60	4.5	12 (Fo±50MHz)	-30 to +85
MMDS	DFCH42G59HDHAB	2593	186	1.8	50 (Fo-400MHz)	-35 to +85