

## Dielectric Filters (GIGAFIL®)



**muRata**

*Innovator  
in Electronics*

Murata  
Manufacturing Co., Ltd.

Cat.No.O81E-2



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• 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.

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07.7.23

#### **for EU RoHS Compliant**

- All the products on this catalog are complied with EU RoHS.
- EU RoHS is "the European Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment".
- For more details, please refer to our website 'Murata's Approach for EU RoHS' (<http://www.murata.com/info/rohs.html>).

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● Part Numbering

Antenna/Duplexer Dielectric Filters (GIGAFIL®)  
for RF/Local Dielectric Band Pass Filters (GIGAFIL®)

(Part Number)

DF

YK6

1G95

LBNBB-

TT1

1

2

3

4

5

①Product ID

Product ID	
DF	Microwave Filters (GIGAFIL®)

②Series

Two capital letters and a number express the series name.

③Nominal Center Frequency

Expressed by four-digit alphanumerics. If the unit is "MHz", it is expressed by three figures plus "M". If the unit is "GHz", a decimal point is expressed by capital letter "G".

④Individual Specification Code

Expressed by five letters plus a hyphen.

⑤Packaging

Code	Packaging
T**	Tray
R**	Reel

Packaging varies on each product type. Please contact us for details.

# Dielectric Filters (GIGAFIL®)

**muRata**

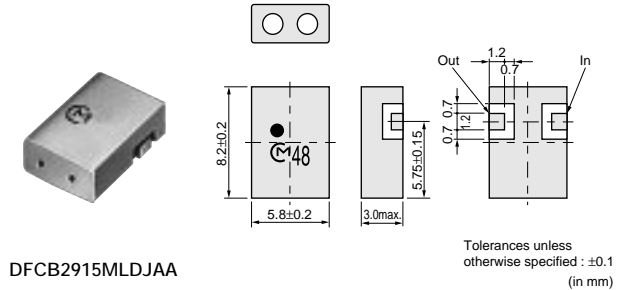
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## Band Pass Filters

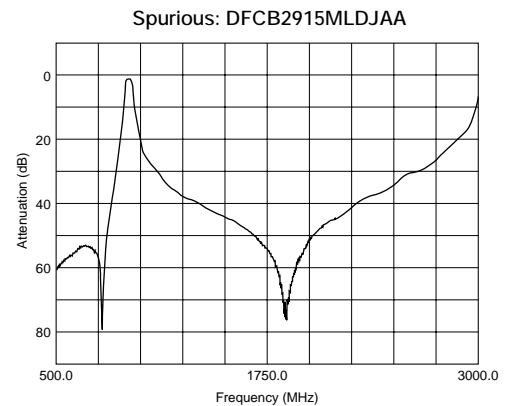
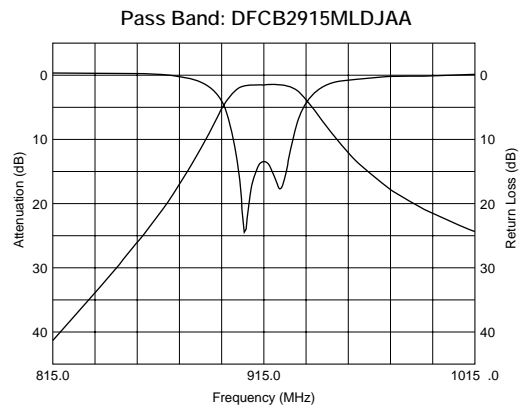
### DFCB Series 800/900MHz

#### ■ 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 ( $0 \pm 5 \text{ ppm}/(\text{degree C}) \text{ max}$ ).
4. Excellent mechanical stability without vibratile structure.
5. SMD and reflow soldering is available.
6. Mountable by automatic placing machine.



#### ■ Characteristics



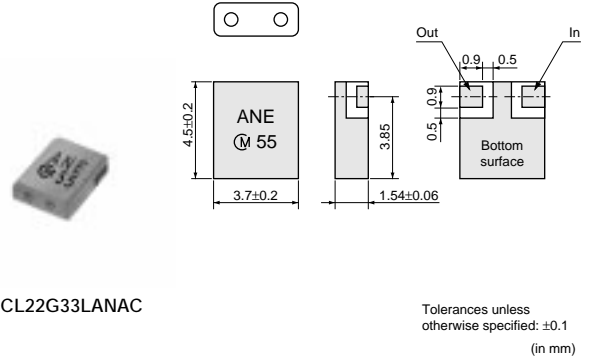
Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
AMPS	DFCB2836MLDJAA	836.5	25	2.6	6.5 (869 to 894MHz)	-35 to +85
AMPS	DFCB2881MLDJAA	881.5	25	2.6	9 (824 to 849MHz)	-35 to +85
GSM	DFCB2902MLDJAA	902.5	25	2.6	27 (Fo-77.5MHz)	-35 to +85
WLAN915	DFCB2915MLDJAA	915	26	2.5	27 (837.5MHz)	-35 to +85
GSM	DFCB2947MLDJAA	947.5	25	2.6	27 (Fo-77.5MHz)	-35 to +85
LMR	DFCB3815MLDJAA	815.5	19	2.5	12 (Fo±35.5MHz)	-35 to +85
AMPS	DFCB3836MLDJAA	836.5	25	3.0	12 (869 to 894MHz)	-35 to +85
LMR	DFCB3860MLDJAA	860.5	19	2.5	13 (Fo+35.5MHz)	-35 to +85
AMPS	DFCB3881MLDJAA	881.5	25	3.0	15 (824 to 849MHz)	-35 to +85
GSM	DFCB3902MLDJAA	902.5	25	3.0	45 (Fo-77.5MHz)	-35 to +85
WLAN915	DFCB3915MLDJAA	915	26	3.0	15 (Fo-32.5MHz)	-35 to +85
GSM	DFCB3947MLDJAA	947.5	25	3.0	45 (Fo-77.5MHz)	-35 to +85

## DFCB/DFCL Series 1.5-5GHz

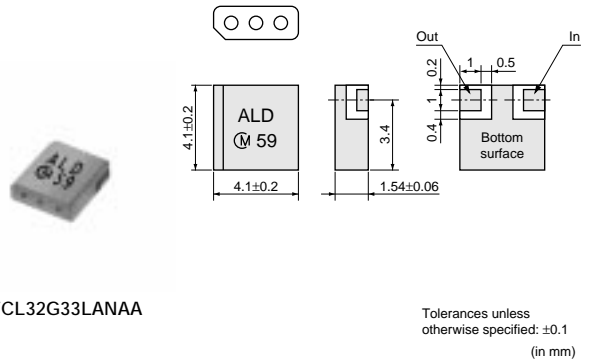
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6. Mountable by automatic placing machine.

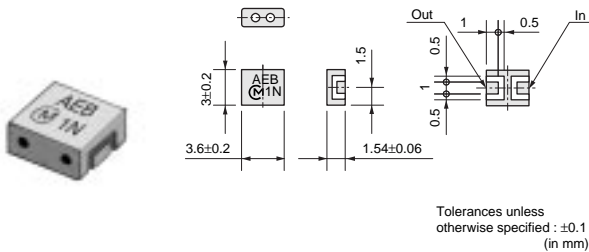
DFCL22G33LANAC



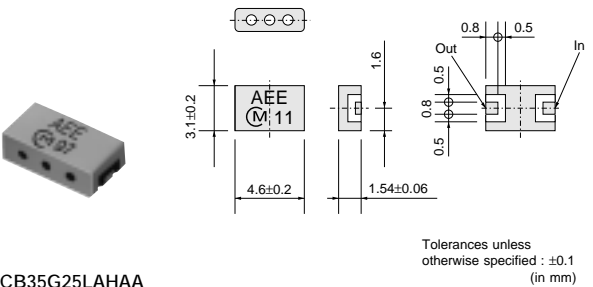
DFCL32G33LANAA



DFCB25G25LAHAA

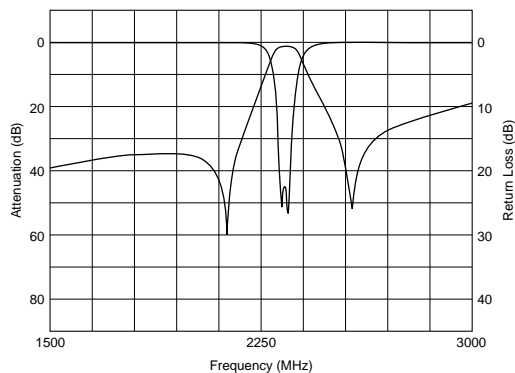


DFCB35G25LAHAA

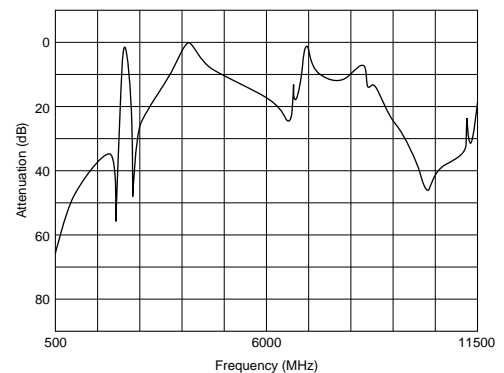


### ■ Characteristics

Pass Band: DFCL22G33LANAC



Spurious: DFCL22G33LANAC

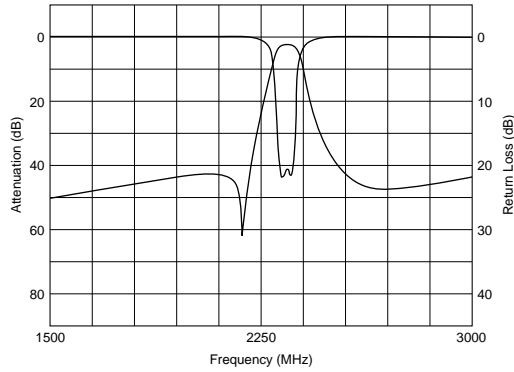


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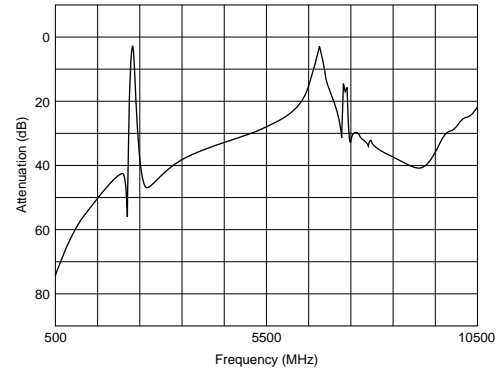
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## Characteristics

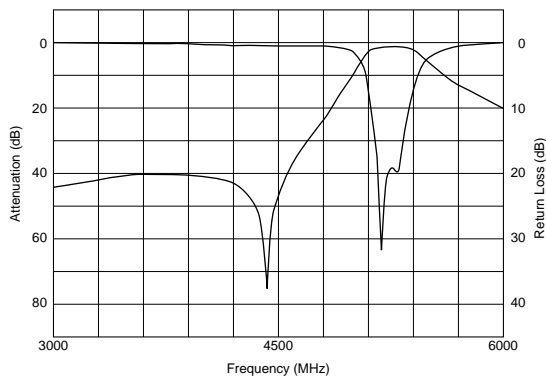
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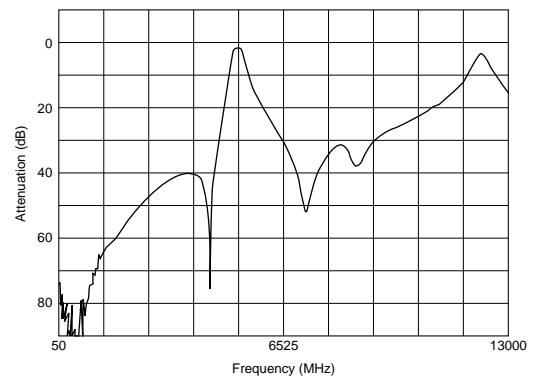
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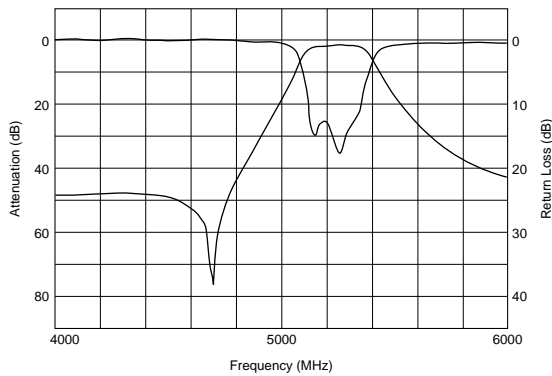
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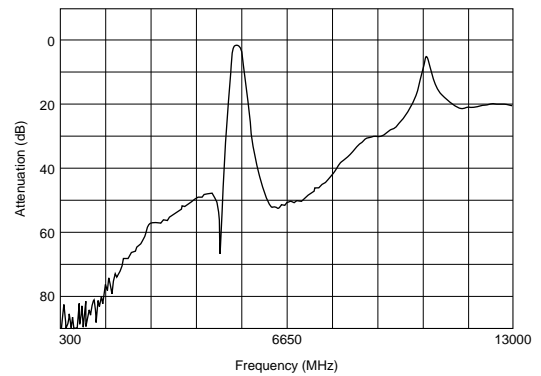
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Pass Band: DFCB35G25LAHAA



Spurious: DFCB35G25LAHAA



Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
DAB	DFCB21G47LBJAA	1472	40	2.0	38 (1122MHz)	-40 to +85
GPS	DFCB21G57LBJAB	1575.42	3	1.3	37 (1850 to 1910MHz)	-35 to +85
GPS	DFCL21G57LBJAE	1575.42	2.046	3.9	30 (1475.42MHz)	-35 to +85
GPS	DFCB21G57LCJAA	1575.42	2	3.5	15 (Fo±50MHz)	-40 to +85
GPS	DFCB21G57LDJAB	1575.42	2	3.15	18 (Fo±50MHz)	-35 to +85
DCS1800	DFCB21G84LDJAA	1842.5	75	2.0	20 (Fo-160MHz)	-35 to +85
DECT	DFCB21G89LBJAA	1890	20	2.0	40 (1660 to 1680MHz)	-35 to +85
DECT	DFCB21G89LDJAA	1890	20	2.0	45 (1660 to 1680MHz)	-40 to +85
CDMA1.9	DFCB21G92LDJAA	1920	20	1.9	16 (1800 to 1820MHz)	-40 to +85
PCS1.9	DFCB21G96LDJAA	1960	60	1.5	17 (2360MHz)	-35 to +85
Sirius Radio	DFCB22G32LBJAA	2326	14	1.8	8.5 (2227MHz)	-35 to +85
XM Satellite	DFCL22G33LANAC	2339	14	2.0	22 (0.3 to 2188MHz)	-40 to +125

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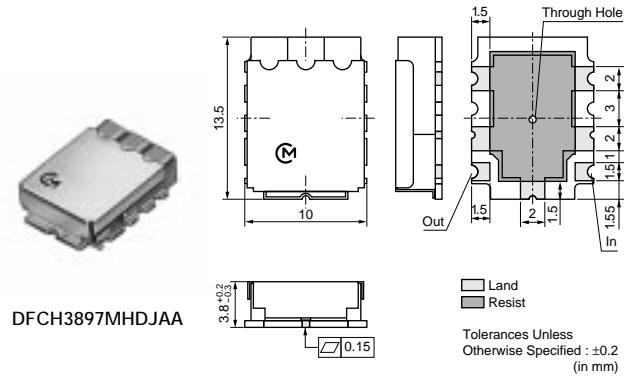
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Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
Wibro	DFCB22G34LBJAA	2345	80	2.5	20 (350 to 1200MHz)	-35 to +85
WLAN2.4	DFCB22G44LBJAA	2442	84	2.0	16 (Fo-250MHz)	-40 to +85
WLAN2.4	DFCB22G45LBJAA	2450	100	2.0	15 (Fo-250MHz)	-40 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
DAB	DFCB31G47LBJAA	1472	40	3.0	45 (1100MHz)	-35 to +85
DCS1800	DFCB31G74LBJAA	1747.5	75	3.5	45 (1464 to 1539MHz)	-35 to +85
DCS1800	DFCB31G84LBJAA	1842.5	75	3.5	45 (1559 to 1634MHz)	-35 to +85
DCS1800	DFCB31G84LBJAB	1842.5	75	2.75	45 (0.3 to 1500MHz)	-35 to +85
PCS1.9	DFCB31G88LBJAA	1880	60	3.7	43 (1640 to 1664MHz)	-35 to +85
PCS1.9	DFCB31G88LBJAB	1880	60	4.0	41 (2043 to 2103MHz)	-35 to +85
W-CDMA	DFCB31G95LBJAA	1950	60	3.5	35 (2110 to 2170MHz)	-35 to +85
PCS1.9	DFCB31G96LBJAA	1960	60	3.7	5 (1910MHz)	-35 to +85
PCS1.9	DFCB31G96LBJAB	1960	60	3.0	10 (1498 to 1860MHz)	-35 to +85
W-CDMA	DFCB32G14LBJAA	2140	60	3.7	30 (1920 to 1980MHz)	-35 to +85
Sirius Radio	DFCB32G32LBJAA	2326	14	3.0	24 (2227MHz)	-35 to +85
XM Satellite	DFCL32G33LANAA	2339	14	3.0	39 (0.3 to 2188MHz)	-40 to +125
WLAN2.4	DFCB32G44LBJAA	2442	84	3.2	30 (Fo-250MHz)	-40 to +85
WLAN2.4	DFCB32G45LBJAA	2450	100	3.2	30 (Fo-250MHz)	-40 to +85
MMDS/WiMax	DFCB32G59LBHAA	2595	190	2.0	40 (1930 to 2170MHz)	-35 to +85
MMDS/WiMax	DFCB32G59LBHAB	2595	190	1.5	35 (1930 to 2170MHz)	-35 to +85
FWA	DFCL33G40LCHAA	3400	200	2.0	38 (3050MHz)	-35 to +85
FWA	DFCL33G40LCHAB	3400	200	1.3	30 (3050MHz)	-35 to +85
WiMAX	DFCL33G50LCHAA	3500	200	2.0	38 (3150MHz)	-35 to +85
WiMAX	DFCL33G50LCHAB	3500	200	1.3	30 (3150MHz)	-35 to +85
WiMAX	DFCL33G55LCHAB	3550	300	3.0	40 (450MHz)	-35 to +85
FWA	DFCL33G60LCHAA	3600	200	2.0	38 (3250MHz)	-35 to +85
FWA	DFCL33G60LCHAB	3600	200	1.3	30 (3250MHz)	-35 to +85
FWA	DFCL33G70LCHAA	3700	200	2.0	38 (3350MHz)	-35 to +85
FWA	DFCL33G70LCHAB	3700	200	1.3	30 (3350MHz)	-35 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



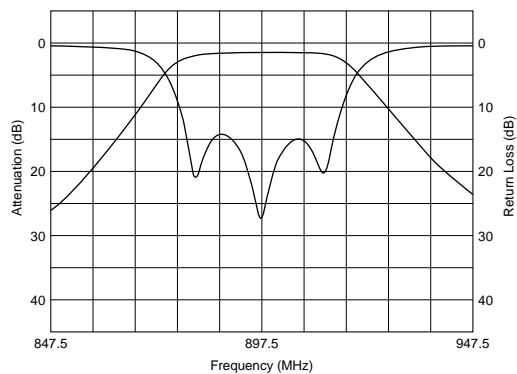
## 1

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 ( $0 \pm 5 \text{ ppm}/(\text{degree C}) \text{ max}$ ).
4. Excellent mechanical stability without vibratile structure.
5. SMD and reflow soldering is available.
6. Mountable by automatic placing machine.

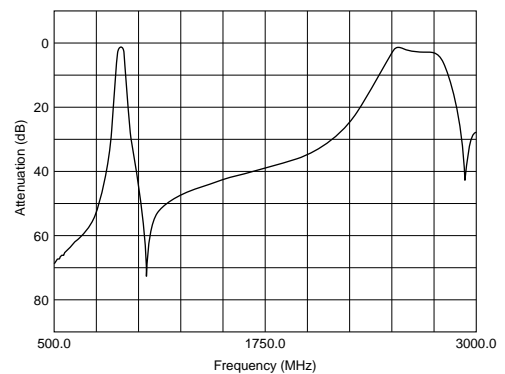


## ■ Characteristics

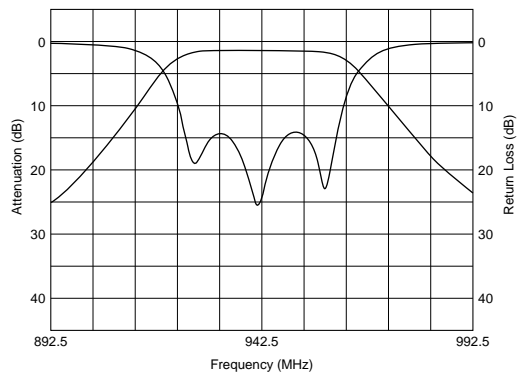
Pass Band: DFCH3897MHDJAA



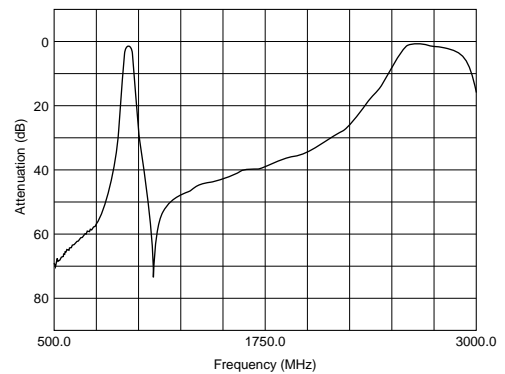
Spurious: DFCH3897MHDJAA



Pass Band: DFCH3942MHDJAA

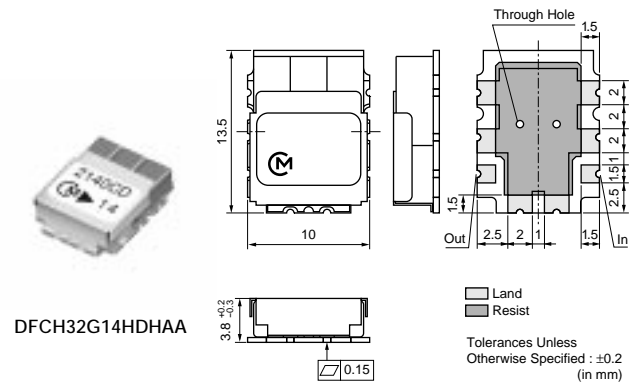


Spurious: DFCH3942MHDJAA

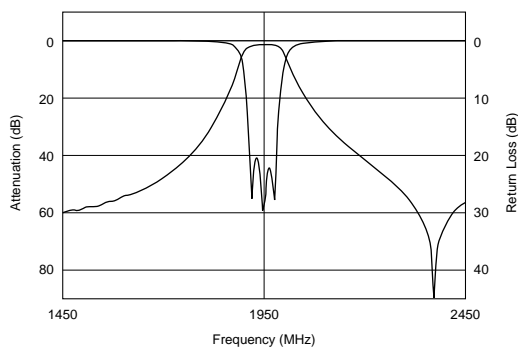


Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
LMR	<b>DFCH3815MHDJAA</b>	815	20	2.8	36 (Fo±80MHz)	-35 to +85
AMPS	<b>DFCH3836MHDJAA</b>	836.5	25	2.6	12 (Fo±32.5MHz)	-35 to +85
LMR	<b>DFCH3860MHDJAA</b>	860	20	2.8	36 (Fo±80MHz)	-35 to +85
AMPS	<b>DFCH3881MHDJAA</b>	881.5	25	2.6	12 (Fo±32.5MHz)	-35 to +85
EGSM	<b>DFCH3897MHDJAA</b>	897.5	35	3.0	6 (Fo±27.5MHz)	-35 to +85
GSM	<b>DFCH3902MHDJAA</b>	902.5	25	2.6	12 (Fo±32.5MHz)	-35 to +85
EGSM	<b>DFCH3942MHDJAA</b>	942.5	35	3.0	6 (Fo±27.5MHz)	-35 to +85
GSM	<b>DFCH3947MHDJAA</b>	947.5	25	2.6	12 (Fo±32.5MHz)	-35 to +85
EGSM	<b>DFCH4897MHDJAA</b>	897.5	35	4.6	13 (Fo±27.5MHz)	-35 to +85
EGSM	<b>DFCH4942MHDJAA</b>	942.5	35	4.6	13 (Fo±27.5MHz)	-35 to +85

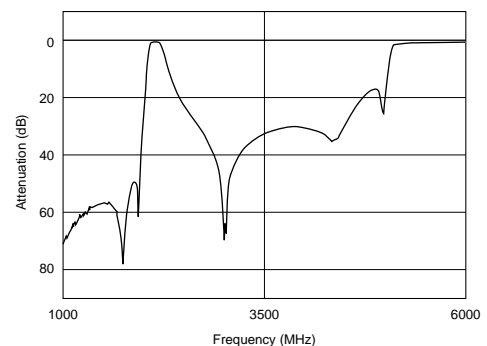
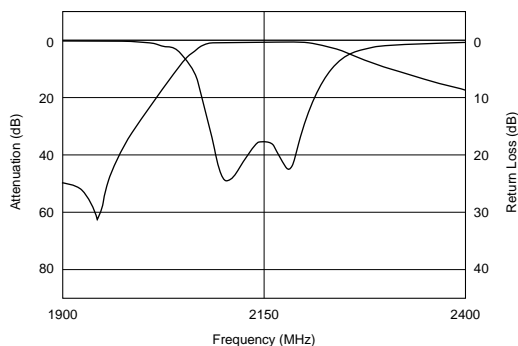
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## Pass Band: DFCH31G95HDHAA



Spurious: DFCH32G14HDHAA



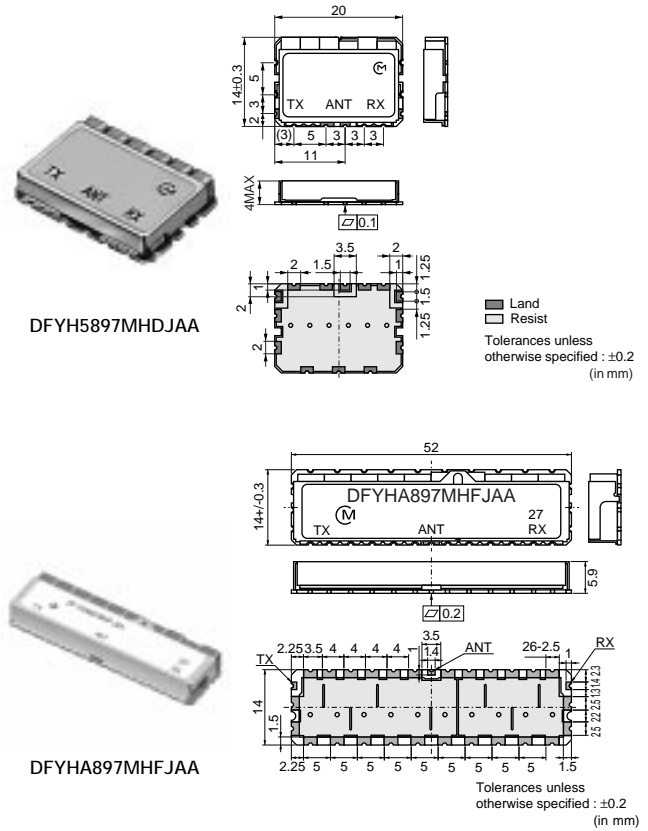
Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
GPS	<b>DFCH21G57HDHAA</b>	1575.5	2	0.9	16 (Fo-140MHz)	-35 to +85
TD-SCDMA	<b>DFCH22G01HDJAA</b>	2017.5	15	1.8	22 (1899 to 1915MHz)	-40 to +85
WLAN2.4	<b>DFCH22G44HDHAA</b>	2442	84	1.2	15 (Fo±250MHz)	-35 to +85
WLAN2.4	<b>DFCH22G45HDHAA</b>	2450	100	1.0	16 (Fo-250MHz)	-35 to +85
MSAT	<b>DFCH31G54HDJAA</b>	1542	34	3.0	30 (1626.5 to 1660.5MHz)	-35 to +85
MSAT	<b>DFCH31G64HDJAA</b>	1643.5	34	3.0	30 (1525 to 1559MHz)	-35 to +85
DCS1800	<b>DFCH31G74HDJAA</b>	1747.5	75	2.0	8 (Fo±80MHz)	-35 to +85
DCS1800	<b>DFCH31G84HDJAA</b>	1842.5	75	2.0	8 (Fo±80MHz)	-35 to +85
PCS1.9	<b>DFCH31G88HDJAA</b>	1880	60	2.2	15 (Fo±100MHz)	-35 to +85
W-CDMA	<b>DFCH31G95HDHAA</b>	1950	60	1.8	45 (1550MHz)	-35 to +85
PCS1.9	<b>DFCH31G96HDJAA</b>	1960	60	2.2	15 (Fo±100MHz)	-35 to +85
TD-SCDMA	<b>DFCH32G01HDNAA</b>	2017.5	15	3.0	38 (1920MHz)	-35 to +85
W-CDMA	<b>DFCH32G14HDHAA</b>	2140	60	1.3	52 (1325 to 1385MHz)	-35 to +85
WLAN2.4	<b>DFCH32G44HDHAA</b>	2442	84	2.4	36 (Fo-250MHz)	-35 to +85
WLAN2.4	<b>DFCH32G45HDHAA</b>	2450	100	2.3	36 (Fo-250MHz)	-35 to +85
MMDS/WiMax	<b>DFCH32G59HDHBA</b>	2593	186	1.0	30 (1930 to 1990MHz)	-35 to +85
DCS1800	<b>DFCH41G74HDJAA</b>	1747.5	75	3.6	10 (Fo±57.5MHz)	-35 to +85
DCS1800	<b>DFCH41G84HDJAA</b>	1842.5	75	3.6	10 (Fo±57.5MHz)	-35 to +85
PCS1.9	<b>DFCH41G88HDJAA</b>	1880	60	4.5	12 (Fo±50MHz)	-35 to +85
PCS1.9	<b>DFCH41G96HDJAA</b>	1960	60	4.5	12 (Fo±50MHz)	-35 to +85



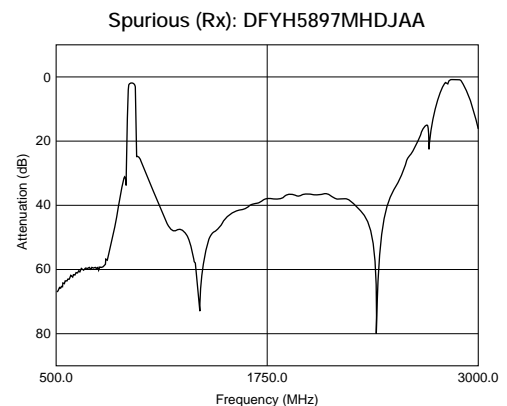
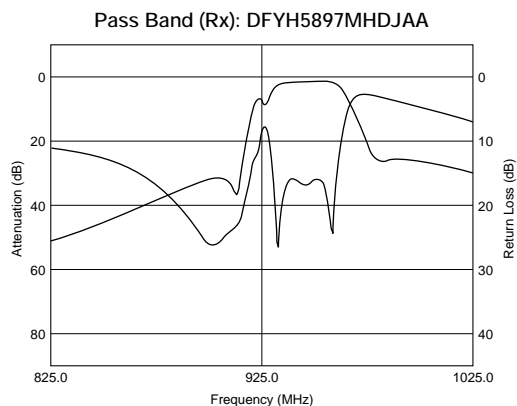
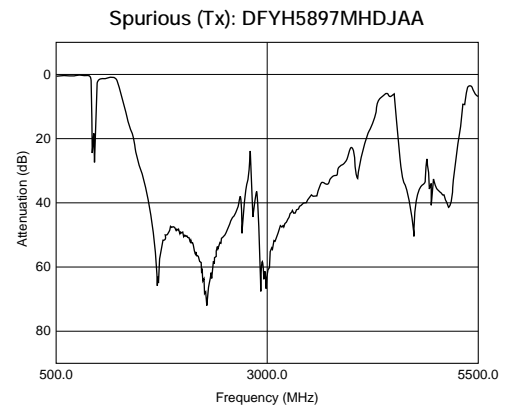
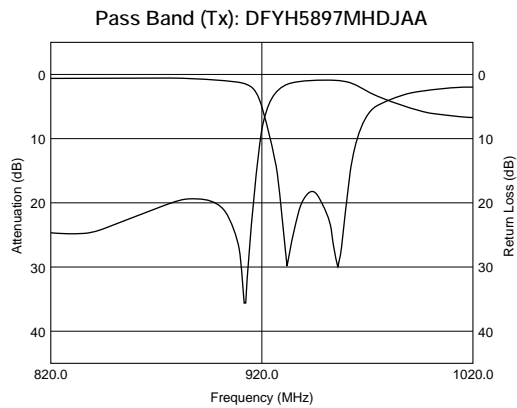
## EGSM: DFYH Series

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5. SMD and reflow soldering is available.
6. Mountable by automatic placing machine.



### ■ Characteristics



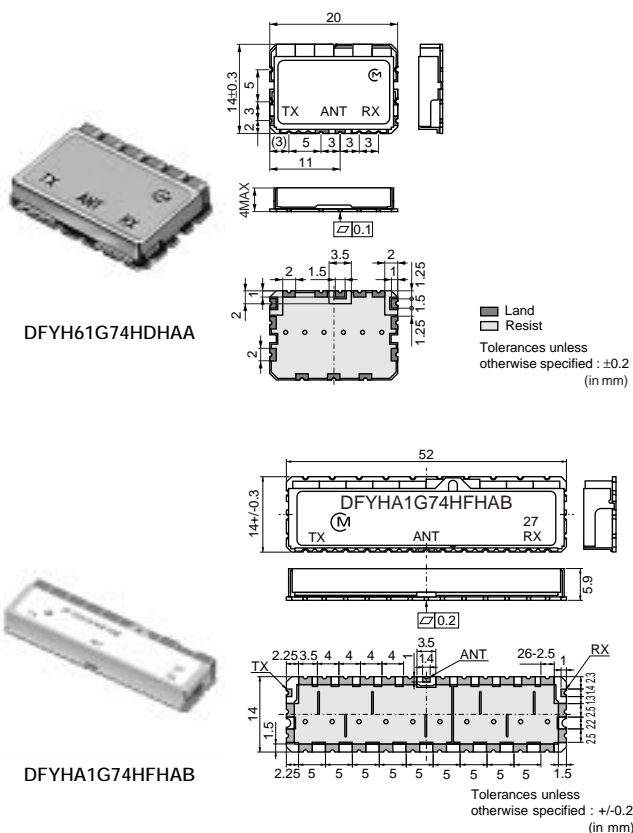
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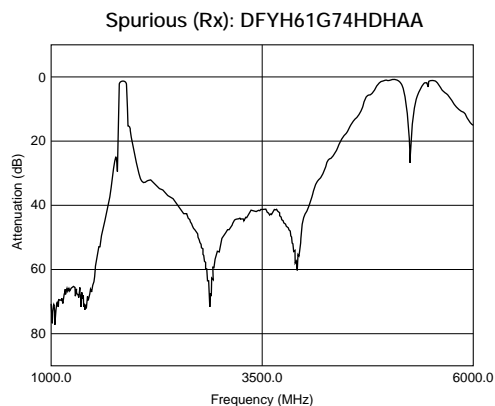
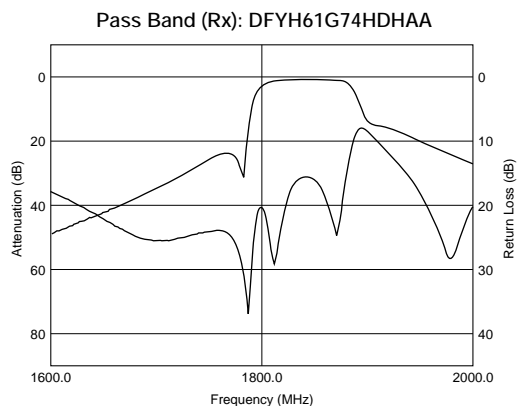
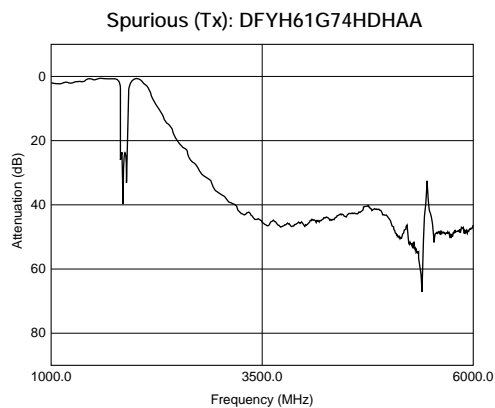
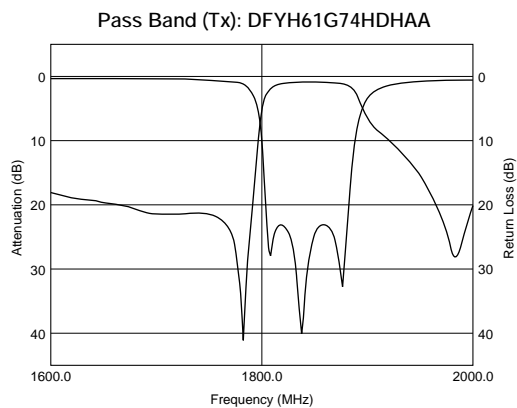
## DCS1800: DFYH Series

### ■ 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 ( $0 \pm 5 \text{ ppm}/(\text{degree C})$  max).
4. Excellent mechanical stability without vibratile structure.
5. SMD and reflow soldering is available.
6. Mountable by automatic placing machine.



### ■ Characteristics



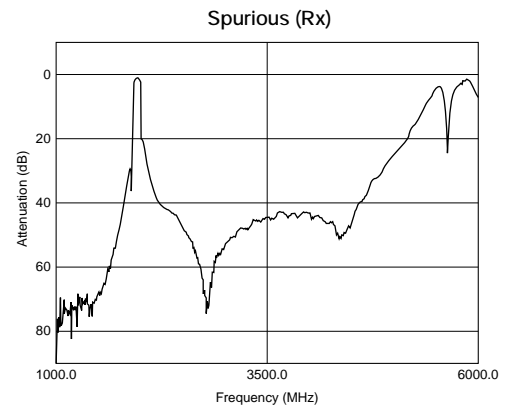
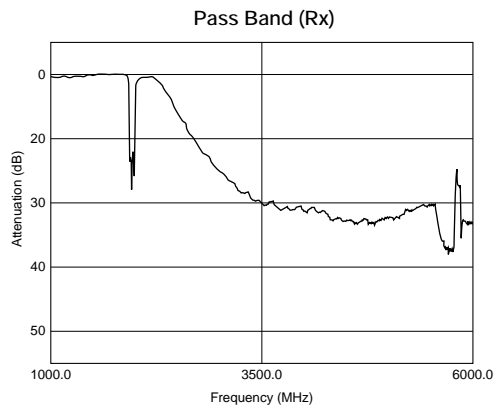
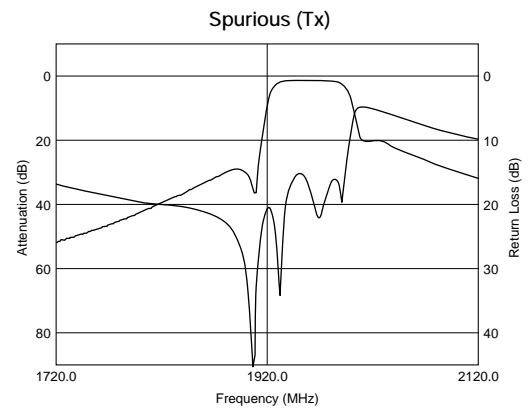
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2



## ■ Features

- [illegible]



Part Number	fo (Tx) (MHz)	Bandwidth (Tx) (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	fo (Rx) (MHz)	Bandwidth (Rx) (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
<b>DFYH61G88HDHAA</b>	1880	60	2.0	17 (1930 to 1990MHz)	1960	60	3.0	20 (1850 to 1910MHz)	-30 to +85
<b>DFYH61G88HDHAB</b>	1880	60	2.3	20 (1930 to 1990MHz)	1960	60	3.2	25 (1850 to 1910MHz)	-30 to +85

## 2

Part Number	fo (Tx) (MHz)	Bandwidth (Tx) (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	fo (Rx) (MHz)	Bandwidth (Rx) (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
<b>DFYHA1G95HFHAA</b>	1950	60	2.5	55 (2110 to 2170MHz)	2140	60	2.0	70 (1920 to 1980MHz)	-35 to +85



## 2



***muRata***





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 • 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.

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- |                             |  |
|-----------------------------|--|
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| ③ Undersea equipment        | ④ Power plant equipment  |
| ⑤ Medical equipment         | ⑥ Transportation equipment (vehicles, trains, ships, etc.)   |
| ⑦ Traffic signal equipment  | ⑧ Disaster prevention / crime prevention equipment   |
| ⑨ Data-processing equipment | ⑩ Application of similar complexity and/or reliability requirements to the applications listed above |

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