

Dielectric Filters (GIGAFIL[®])



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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GIGAFIL® in this catalog is the trademark of Murata Manufacturing Co., Ltd.

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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
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① ② ③ ④ ⑤

① Product ID

Product ID	
DF	Microwave Filters (GIGAFIL®)

② Series

Two capital letters and a number express the series name.

③ Nominal 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".

④ Individual Specification Code

Expressed by five letters plus a hyphen.

⑤ Packaging

Code	Packaging
T**	Tray
R**	Reel

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

Dielectric Filters (GIGAFIL®)

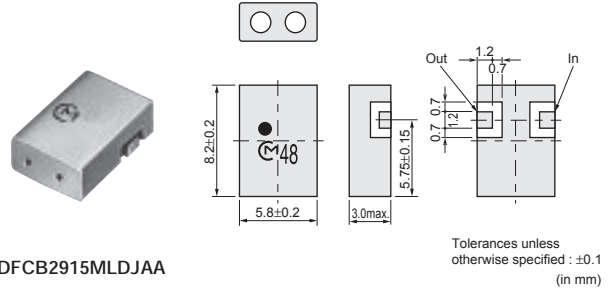


Band Pass Filters

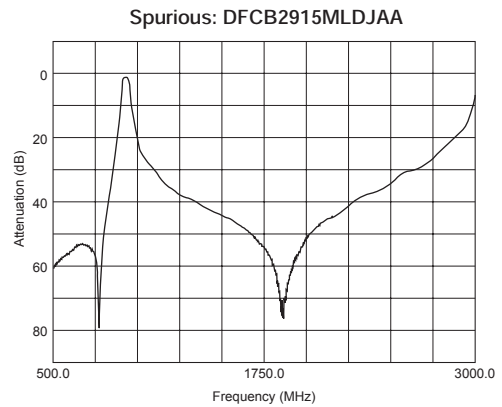
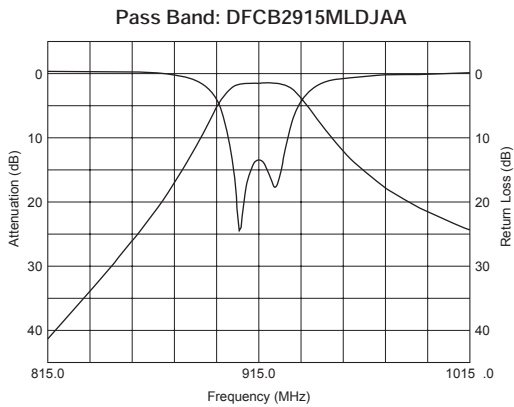
DFCB Series 800/900MHz

■ 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



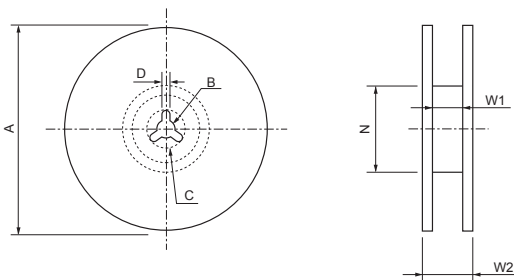
Application	Part Number	fo (MHz)	Bandwidth (MHz)	IL at BW (dB max.)	Attenuation (dB min.)	Operation Temperature Range (°C)
AMPS	DFCB2836MLDJAA	836.5	25	2.6	6.5 (869 to 894MHz)	-35 to +85
AMPS	DFCB2881MLDJAA	881.5	25	2.6	9 (824 to 849MHz)	-35 to +85
GSM	DFCB2902MLDJAA	902.5	25	2.6	27 (Fo-77.5MHz)	-35 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

Notice/Packaging/Soldering and Mounting

■ Notice

1. When handling products, be careful not to flaw outer-electrode. If you flaw outer-electrode, the device don't satisfy the specifications.
2. When handling products, be careful not to touch outer-electrode with bare hand. If you touch outer-electrode with bare hand, the soldering performance of device is reduced.
3. Do not apply excessive pressure or shock to product in handling or transportation because the ceramic material which is used inside might be destructed.

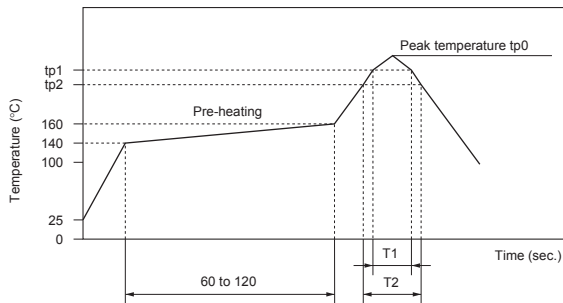
■ Reel



Wide	A±2.0	B±0.5	C±0.8	D±0.5	N min.	W1±1.5	W2 max.
12	ø178	ø13	ø21	2	ø50	13.5	18.5
	ø330	ø13	ø21	2	ø50	13.5	18.5
16	ø178	ø13	ø21	2	ø50	17.5	23
	ø330	ø13	ø21	2	ø50	17.5	23
24	ø330	ø13	ø21	2	ø50	25.5	31
32	ø330	ø13	ø21	2	ø50	33.5	39
44	ø330	ø13	ø21	2	ø50	45.5	51

(in mm)

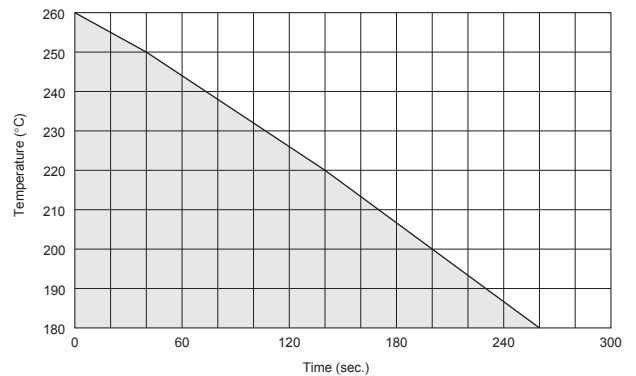
■ Reflow Soldering Conditions



Measuring point of temperature : IN-OUT Terminals of The Device
 Reflow Soldering : Both Convection and Infrared Rays, Hot Air and Hot Plate

	tp0 (°C)	tp1 (°C)	T1 (sec.)	tp2 (°C)	T2 (sec.)
Reflow standard condition	245±5	220	30 to 60	—	—
Test condition of reflow heat resistance	260+5/-0	240	20	220	70

■ Allowable Reflow Soldering Temperature and Time



△ **Note:**

1. Export Control

〈For customers outside Japan〉

No muRata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction (nuclear, chemical or biological weapons or missiles) or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

〈For customers in Japan〉

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

2. Please contact our sales representatives or product engineers before using the products in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this catalog.

- | | |
|-----------------------------|--|
| ① Aircraft equipment | ② Aerospace equipment |
| 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 |

3. Product specifications in this catalog are as of May 2007. They 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. If there are any questions, please contact our sales representatives or product engineers.

4. Please read rating and △CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.

5. This 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.

6. Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or a third party's intellectual property rights and other related rights in consideration of your use of our products and/or information described or contained in our catalogs. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.

7. No ozone depleting substances (ODS) under the Montreal Protocol are used in our manufacturing process.