Dielectric Filters (GIGAFIL[®])



Duplexers

CDMA800: DFYK Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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











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)
DFYK7836MLDJAC	836.5	25.0	2.9	38 (869 to 894MHz)	881.5	25.0	4.0	56 (824 to 849MHz)	-35 to +85
DFYK7836MLEJAA	836.5	25.0	2.6	42 (869 to 894MHz) +10 to +35 degree C	881.5	25.0	3.3	56 (824 to 849MHz) +10 to 35 degree C	-35 to +85



AMPS/CDMA800: DFYG 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+-5 ppm/degree C max.)
- 4. Excellent mechanical stability without vibratile structure
- 5. SMD and reflow soldering available
- 6. Mountable by automatic placement machine



8.2

DFYG7836MLEJAA



(in mm)

2





Tolerances unless otherwise specified: ±0.2

■ Characteristics



Pass Band (Rx): DFYG7836MLEJAA



Spurious (Tx): DFYG7836MLEJAA



Spurious (Rx): DFYG7836MLEJAA



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Spurious (Rx) :DFYG7836MLEJAB



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)
DFYG7836MLEJAA	836.5	25	2.6	42 (869 to 894MHz)	881.5	25	4.1	50 (824 to 849MHz)	-30 to +85
DFYG7836MLEJAB	836.5	25	2.6	42 (869 to 894MHz)	881.5	25	4.5	56 (824 to 849MHz)	-30 to +85



GSM: DFYG 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+-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

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Attenuation









Tolerances unless otherwise specified: ±0.2 (in mm)

0.1

7.7

3.9±0.1

RX



18.8

68

902XB

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4.4 4.05

2.4

ТΧ ANT

Mounted surface

M 🔵



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)
DFYG5902MLEJAA	902.5	25	1.3	14 (935 to 960MHz)	947.5	25	3.5	29 (890 to 915MHz)	-30 to +85
DFYG5902MLEJAB	902.5	25	1.8	14.5 (935 to 960MHz) -20 to +75 degree C	947.5	25	3.2	30 (890 to 915MHz)	-20 to +75
DFYG6902MLEJAA	902.5	25	2.2	20 (935 to 960MHz)	947.5	25	3.2	30 (890 to 915MHz)	-20 to +75



KPCS: DFYK Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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





DFYK61G76LBNBC	







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)
DFYK61G76LBNBC	1765	30	2.3	38 (1840 to 1870MHz)	1855	30	3.3	57 (1750 to 1780MHz)	-35 to +85





CDMA1.9: DFYK Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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



DFYK91G88LEHAC



24.7±0.3

Tolerances unless otherwise specified : ±0.1

(in mm)

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)
DFYK91G88LEHAB	1880	60	3.4	40 (1930 to 1990MHz)	1960	60	4.1	50 (1850 to 1910MHz) 0 to +35 degree C	-35 to +85
DFYK91G88LEHAC	1880	60	3.4	40 (1930 to 1990MHz)	1960	60	4.6	53 (1850 to 1910MHz) -35 to +85 degree C	-35 to +85



W-DCMA: DFYK Series

Features

2

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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









9+/-0.3

DFYK61G95LBJCA

Tolerances unless otherwise specified : ±0.1 (in mm)





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)
DFYK61G95LBJCA	1950	60	1.5	44 (2110 to 2170MHz)	2140	60	1.8	54 (1920 to 1980MHz)	-35 to +85
DFYK61G95LBNCB	1950	60	1.4	43 (2110 to 2170MHz)	2140	60	2.2	48 (1920 to 1980MHz)	-35 to +85



CDMA800: DFYH Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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



DFYH7836MGCJAH



4.5 2.5 2.5 4.5

Tolerances unless otherwise specified : ±0.2 (in mm)









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)
DFYH7836MGCJAH	836.5	25	2.0	32 (869 to 894MHz)	881.5	25	4.3	50 (824 to 849MHz)	-30 to +85

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AMPS/CDMA800: DFYH Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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













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)
DFYH7836MHDJAC	881.5	25	3.0	35 (824 to 849MHz)	836.5	25	4.0	45 (869 to 894MHz)	-30 to +85





EGSM: DFYH Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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



Land Resist Tolerances unless otherwise specified : ±0.2 (in mm)









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)
DFYH5897MHDJAA	897.5	35	2.0	15 (935 to 960MHz)	942.5	35	4.3	20 (905 to 915MHz)	-30 to +85

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GSM: DFYHA Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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













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)
DFYHA897MHFJAA	897.5	35	3.7	30 (925 to 960MHz)	942.5	35	4.4	40 (880 to 915MHz)	-35 to +85





DCS1800: DFYH(A) Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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



Land Resist Tolerances unless otherwise specified : ±0.2 (in mm)









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)
DFYH61G74HDHAA	1747.5	75	2.3	20 (1805 to 1880MHz)	1842.5	75	2.7	20 (1710 to 1785MHz)	-30 to +85
DFYH61G74HDHAB	1747.5	75	2.0	15 (1805 to 1880MHz)	1842.5	75	3.0	20 (1710 to 1785MHz)	-30 to +85
DFYHA1G74HFHAB	1747.5	75	3.8	42 (1805 to 1880MHz)	1842.5	75	4.3	42 (1710 to 1785MHz)	-35 to +85

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PCS1.9: DFYH Series

Features

2

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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













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)
DFYH61G88HDHAA	1880	60	2.0	17 (1930 to 1990MHz)	1960	60	3.0	20 (1850 to 1910MHz)	-30 to +85
DFYH61G88HDHAB	1880	60	2.3	20 (1930 to 1990MHz)	1960	60	3.2	25 (1850 to 1910MHz)	-30 to +85



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W-DCMA: DFYHA Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- 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









Pass Band (Tx)





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)
DFYHA1G95HFHAA	1950	60	2.5	55 (2110 to 2170MHz)	2140	60	2.0	70 (1920 to 1980MHz)	-35 to +85



LMR: DFYH Series

Features

2

- 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





DFYH7815MHDJAA

Tolerances unless otherwise specified : ±0.2 (in mm)









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)
DFYH7815MHDJAA	815	20	2.0	40 (850 to 870MHz)	860	20	4.0	57 (805 to 825MHz)	-30 to +85



MSAT: DFYF Series

Features

- 1. Low insertion loss for using high Q-value dielectric resonators
- 2. Small and light for using high dielectric constant ceramics
- Excellent temperature stability for temperature compensated dielectric constant (0+-5 ppm/degree C max.)
- 4. Excellent mechanical stability without vibratile structure











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)
DFYFB1G54THHAA	1643.5	34	1.0	60 (1525 to 1559MHz)	1542	34	1.2	65 (1626.5 to 1660.5MHz)	-30 to +85



Antennas/Duplexers

SAW Duplexers



Part Number	(Tx->ANT) (MHz)	(Tx->ANT) (dB)	Attenuation (Tx->ANT)	(ANT->Rx) (MHz)	(ANT->Rx) (dB)	Attenuation (ANT->Rx)	(Tx->Rx) (dB)
SAYDV836MAB0F00	836.5	2.3 max. (824MHz~849MHz)	25dBmin. (1648MHz~1698MHz)	881.5	3.5 max. (869MHz~894MHz)	30dBmin. (1039MHz~1078MHz)	55 min. (824MHz~849MHz)
SAYHS836MAD0T00	836.5	2.5 max. (824MHz~849MHz)	43dBmin. (869MHz~894MHz)	881.5	3.5 max. (869MHz~894MHz)	35dBmin. (954MHz~980MHz)	56 min. (824MHz~849MHz)