

F4CC/F4CD (T1) DMS Series (IF SAW Filters)

The F4 Series filters are Double Mode SAW (DMS) filters fabricated on quartz substrates for the 200 to 400 MHz range.

- $T_A = -30$ to 85°C
- Balanced Input/Output

Part Number	Application	Center Frequency (MHz)	Bandwidth (kHz)	Insertion Loss (dB)	Package (mm)	Description
F4CC-246M00-T101	GSM/DCS1800	246	160	5.9	7.0 x 5.0 x 1.6	Balanced Input/Output
F4CD-400M00-T102	GSM/DCS1800	400	200	4.5	5.0 x 5.0 x 1.5	Balanced Input/Output

F5CM (B2) DMS Series

The F5CM series filters are designed for RF interstage applications featuring balanced/unbalanced I/O ports.

- $T_A = -30$ to 85°C
- $P_{IN} = 10$ mW

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)	Description	
					Input	Output
F5CM-902M50-B263	GSM (Tx)	890 to 915	3.2	3.0 x 3.0 x 1.2	50% Balanced	50% Unbalanced
F5CM-902M50-B264	GSM (Tx)	890 to 915	3.0	3.0 x 3.0 x 1.2	100% Balanced	50% Unbalanced
F5CM-902M50-B265	GSM (Tx)	890 to 915	3.6	3.0 x 3.0 x 1.2	150% Balanced	50% Unbalanced
F5CM-947M50-B260	GSM (Rx)	935 to 960	3.0	3.0 x 3.0 x 1.2	50% Unbalanced	50% Balanced
F5CM-947M50-B261	GSM (Rx)	935 to 960	2.8	3.0 x 3.0 x 1.2	50% Unbalanced	100% Balanced
F5CM-947M50-B262	GSM (Rx)	935 to 960	3.3	3.0 x 3.0 x 1.2	50% Unbalanced	150% Balanced
F5CM-836M50-B268	Amps/CDMA (Tx)	824 to 849	2.8	3.0 x 3.0 x 1.2	50% Balanced	50% Unbalanced
F5CM-881M50-B266	Amps/CDMA (Rx)	869 to 894	2.8	3.0 x 3.0 x 1.2	50% Unbalanced	50% Balanced

The F5CE (D2) DMS filters have high stop band attenuation and excellent pass band flatness.

- $T_A = -30$ to 85°C
- $P_{IN} = 10$ mW
- 50-Ohm Input/Output

F5CE (D2) DMS Series

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)
F5CE-950M00-D230	PDC (Tx)	940 to 960	2.6	3.0 x 3.0 x 1.2
F5CE-820M00-D231	PDC (Rx)	810 to 830	2.5	3.0 x 3.0 x 1.2
F5CE-836M50-D232	AMPS (Tx)	824 to 849	2.7	3.0 x 3.0 x 1.2
F5CE-881M50-D233	AMPS (Rx)	869 to 894	2.7	3.0 x 3.0 x 1.2
F5CE-902M50-D234	GSM (Tx)	890 to 915	2.8	3.0 x 3.0 x 1.2
F5CE-947M50-D235	GSM (Rx)	935 to 960	2.7	3.0 x 3.0 x 1.2
F5CE-915M00-D238	ISM 900 (Tx)	911.5 to 918.5	3.2	3.0 x 3.0 x 1.2

F5CH (L2) Series (Ladder SAW Filters)

The F5CH family of LiTaO₃ SAW bandpass filters have been designed for RF filter applications in the 700 to 1000 MHz frequency range.

- T_A = -30 to 85°C
- P_{IN} = 200 mW

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)	Comments
F5CH-836M50-L2AL	AMPS/CDMA (Tx)	824 to 849	1.6	3.8 x 3.8 x 1.5	
F5CH-836M50-L2AW	AMPS/CDMA (Tx)	824 to 849	2.6	3.8 x 3.8 x 1.5	High Rejection
F5CH-881M50-L2AM	AMPS/CDMA (Rx)	869 to 894	2.5	3.8 x 3.8 x 1.5	
F5CH-881M50-L2AV	AMPS/CDMA (Rx)	869 to 894	3.0	3.8 x 3.8 x 1.5	High Rejection
F5CH-888M50-L2CL	ETACS (Tx)	872 to 905	3.0	3.8 x 3.8 x 1.5	
F5CH-888M50-L2CW	ETACS (Tx)	872 to 905	3.8	3.8 x 3.8 x 1.5	High Rejection
F5CH-933M50-L2CM	ETACS (Rx)	917 to 950	3.8	3.8 x 3.8 x 1.5	
F5CH-911M50-L2DL	NTACS (Tx)	898 to 925	2.6	3.8 x 3.8 x 1.5	
F5CH-856M50-L2DM	NTACS (Rx)	843 to 870	2.5	3.8 x 3.8 x 1.5	
F5CH-902M50-L2EL	GSM (Tx)	890 to 915	1.8	3.8 x 3.8 x 1.5	
F5CH-902M50-L2EW	GSM (Tx)	890 to 915	2.9	3.8 x 3.8 x 1.5	High Rejection
F5CH-947M50-L2EM	GSM (Rx)	935 to 960	2.5	3.8 x 3.8 x 1.5	
F5CH-947M50-L2EV	GSM (Rx)	935 to 960	2.8	3.8 x 3.8 x 1.5	High Rejection
F5CH-897M50-L2KL	EGSM (Tx)	880 to 915	2.4	3.8 x 3.8 x 1.5	
F5CH-942M50-L2KM	EGSM (Rx)	925 to 960	3.2	3.8 x 3.8 x 1.5	
F5CH-942M50-L2KV	EGSM (Rx)	925 to 960	3.0	3.8 x 3.8 x 1.5	High Rejection
F5CH-950M00-L2FW	PDC800 (Tx)	940 to 960	2.8	3.8 x 3.8 x 1.5	High Rejection
F5CH-820M00-L2FM	PDC800 (Rx)	810 to 830	1.8	3.8 x 3.8 x 1.5	
F5CH-820M00-L2FV	PDC800 (Rx)	810 to 830	3.0	3.8 x 3.8 x 1.5	High Rejection
F5CH-940M50-L2MD	Dual-PDC800 (Tx)	925 to 958	2.7	3.8 x 3.8 x 1.5	High Rejection
F5CH-915M00-L2JW	ISM900	902 to 928	3.0	3.8 x 3.8 x 1.5	High Rejection

F5CJ (L2) Series (Ladder SAW Filters)

The F5CJ ladder SAW filters are in a 3.8 x 3.8 x 1.5 mm package with a round cap. These SAW filters are fabricated with LiTaO₃ and operate from 700 to 1000 MHz.

- T_A = -3 to 85°C
- P_{IN} = 200 mW

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)
F5CJ-881M50-L212	AMP/ACD/CDMA (Rx)	869 to 894	1.0	3.8 x 3.8 x 1.5
F5CJ-947M50-L213	GSM/NMT (Tx)	935 to 960	1.8	3.8 x 3.8 x 1.5
F5CJ-935M00-L201	2-Way Pager	929 to 941	2.4	3.8 x 3.8 x 1.5

F5CE/F6CE (K2) Series (Ladder SAW Filters)

The F5/F6CE (K2) series of LiTaO₃ ladder SAW filters are used for interstage RF filter applications in the 700 to 1700 MHz range.

- T_A = -30 to 85°C
- P_{IN} = 200 mW
- 50-Ohm Input/Output

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)	Comments
F5CE-836M50-K205	AMPS (Tx)	824 to 849	2.7	3.0 x 3.0 x 1.2	
F5CE-836M50-K225	AMPS (Tx)	824 to 849	2.0	3.0 x 3.0 x 1.2	
F5CE-881M50-K206	AMPS (Rx)	869 to 894	2.0	3.0 x 3.0 x 1.2	
F5CE-881M50-K210	AMPS (Rx)	869 to 894	2.7	3.0 x 3.0 x 1.2	High Rejection
F5CE-897M50-K226	EGSM (Tx)	880 to 915	2.5	3.0 x 3.0 x 1.2	
F5CE-942M50-K216	EGSM (Rx)	925 to 960	2.5	3.0 x 3.0 x 1.2	
F5CE-950M00-K201	PDC800 (Tx)	940 to 960	3.0	3.0 x 3.0 x 1.2	
F5CE-820M00-K202	PDC800 (Rx)	810 to 830	2.1	3.0 x 3.0 x 1.2	
F5CE-820M00-K204	PDC800 (Rx)	810 to 830	3.0	3.0 x 3.0 x 1.2	High Rejection
F5CE-906M00-K211	JCDMA (Tx)	887 to 925	2.5	3.0 x 3.0 x 1.2	
F5CE-906M00-K215	JCDMA (Tx)	887 to 925	3.0	3.0 x 3.0 x 1.2	High Rejection
F5CE-851M00-K212	JCDMA (Rx)	832 to 870	2.5	3.0 x 3.0 x 1.2	
F6CE-1G4410-K220	PDC 1.5G (Tx)	1429 to 1453	2.2	3.0 x 3.0 x 1.2	
F6CE-1G4890-K221	PDC 1.5G (Rx)	1477 to 1501	2.5	3.0 x 3.0 x 1.2	
F6CE-1G6190-K222	PDC 1.5G (Lo)	1607 to 1631	2.4	3.0 x 3.0 x 1.2	

F6CE (L2) Series (Ladder SAW Filters)

The F6CE series of LiTaO₃ ladder SAW bandpass filters have been designed for applications in the 1000 to 2500 MHz range and offer superior RF stability over a wide range of operating temperatures.

- T_A = -30 to 85°C
- Low Insertion Loss
- 50-Ohm Input/Output

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Pin (mW)	Package (mm)	Comments
F6CE-1G5754-L2UA	GPS	1574.42 to 1776.42	2.7	10	3.0 x 3.0 x 1.2	
F6CE-1G7475-L2YA	PCN (Tx)	1710 to 1785	3.0	20	3.0 x 3.0 x 1.2	
F6CE-1G8425-L2YB	PCN (Rx)	1805 to 1880	3.3	20	3.0 x 3.0 x 1.2	
F6CE-1G8800-L2XA	US-PCS (Tx)	1850 to 1910	3.2	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G8800-L2XZ	US-PCS (Tx)	1850 to 1910	3.7	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G8800-L2XJ	US-PCS (Tx)	1850 to 1910	2.7	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G9600-L2XB	US-PCS (Rx)	1930 to 1990	3.3	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G9600-L2XK	US-PCS (Rx)	1930 to 1990	3.2	20	3.0 x 3.0 x 1.2	
F6CE-1G9600-L2XY	US-PCS (Rx)	1930 to 1990	3.5	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G7300-L2TC	Korea-PCS (Tx)	1710 to 1750	2.2	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G7475-L2YAC	Korea-PCS (Tx)	1720 to 1780	2.5	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G7650-L2TA	Korea-PCS (Tx)	1750 to 1780	2.2	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G8200-L2TD	Korea-PCS (Rx)	1800 to 1840	2.2	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G8425-L2YBC	Korea-PCS (Rx)	1810 to 1870	3.0	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-1G8550-L2TB	Korea-PCS (Rx)	1840 to 1870	2.2	20	3.0 x 3.0 x 1.2	High Rejection
F6CE-2G4500-L2WA	Wireless LAN	2400 to 2497	4.0	10	3.0 x 3.0 x 1.2	
F6CE-2G4840-L2WC	Wireless LAN	2471 to 2497	2.5	10	3.0 x 3.0 x 1.2	
F6CE-2G4418-L2WD	Wireless LAN	2400 to 2483.5	3.2	10	3.0 x 3.0 x 1.2	
F6CE-1G9500-L2ZP	W-CDMA (Tx)	1920 to 1980	3.2	20	3.0 x 3.0 x 1.2	
F6CE-2G1400-L2ZQ	W-CDMA (Rx)	2110 to 2170	3.2	20	3.0 x 3.0 x 1.2	

F5CG (A2) Series (Antenna Filter)

This LiTaO₃ Ladder SAW antenna filter is used to protect the receiver from the transmitter.

- T_A = -30 to 85 °C
- Small Size, Lightweight

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Package (mm)	Comments
F5CG-856M50-A2D4	NTACS (Rx)	843 to 870	3.1	5.0 x 5.0 x 1.5	Pin= 1 Watt
F5CG-881M50-A2A4	AMPS (Rx)	869 to 894	3.4	5.0 x 5.0 x 1.5	Pin= 1 Watt

D5CC (D1) Series (Antenna Duplexer)

The D5CC series of LiTaO₃ ladder SAW antenna duplexers are in the frequency range of 700 to 1000 MHz. The D5CC series has a transmitter filter, receiver filter and matching circuit, all housed in a small package.

- T_A = -30 to 85 °C
- High Power, 1.2W max
- 50-Ohm Impedance

Part Number	Application	Frequency Band (MHz)	Insertion Loss (dB)	Isolation (dB)	Package (mm)
D5CC-881M50-D1A2	AMPS (Tx)	824 to 849	2.3	43	9.5 x 7.5 x 2.2
	AMPS (Rx)	869 to 894	3.0	50	
D5CC-881M50-D1A4	AMPS (Tx)	824 to 849	2.0	52	9.5 x 7.5 x 2.2
	AMPS (Rx)	869 to 894	3.8	49	

G5CH/G5CN/G6CH (L2/D2) Series (Dual SAW Filters)

This series of dual SAW filters make it possible to shrink the size of portable wireless communications equipment by offering dual filters with internal matching in a single package.

Part Number	Application	BPF Filter No.	Frequency Band (MHz)	Insertion Loss (dB)	Internal Connection	Package (mm)	Comment
G5CN-942M50-D291	PDC800 (Tx)	1	893 to 848	2.8	2 in / 2 out	3.0 x 3.0 x 1.2	
		2	925 to 960	2.8			
G5CN-877M50-D292	PDC800 (Rx)	1	810 to 843	2.7	1 in / 2 out	3.0 x 3.0 x 1.2	High Rejection
		2	870 to 885	2.8			
G5CH-865M00-L212	J-CDMA (Rx)	1	832 to 846	2.5	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	860 to 870	2.5			
G6CH-1G8800-L214	AMPS + PCS (Tx)	1	824 to 849	2.9	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	1850 to 1910	3.0			
G6CH-1G9600-L215	AMPS + PCS (Rx)	1	869 to 894	3.3	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	1930 to 1990	2.8			
G6CH-1G7475-L216	GSM + PCN (Tx)	1	890 to 915	3.4	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	1710 to 1785	3.3			
G6CH-1G8425-L217	GSM + PCN (Rx)	1	935 to 960	3.3	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	1805 to 1880	2.8			
G6CH-1G8425-L224	EGSM + PCN (Rx)	1	925 to 960	2.7	2 in / 2 out	3.8 x 3.8 x 1.5	
		2	1805 to 1880	2.7			