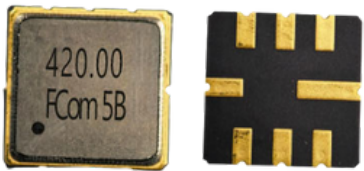


FCom SAW FILTER

Series FSF-5050-420M

8-SMD, No Lead 5.0x5.0 mm



 Feature

- Package: 5.0 × 5.0 mm; height: 1.5 mm max.
- 2 dB bandwidth: 18 MHz min., 21.25 MHz typ.
- Operating temperature: 0 to +50°C
- Maximum input power: 10 dBm; DC: 3 V
- 50 Ω source / load test environment

 Application

- RF signal selection at 420 MHz
- Receiver front-end bandpass filtering
- Band selection in custom receiver designs

ELECTRICAL SPECIFICATIONS

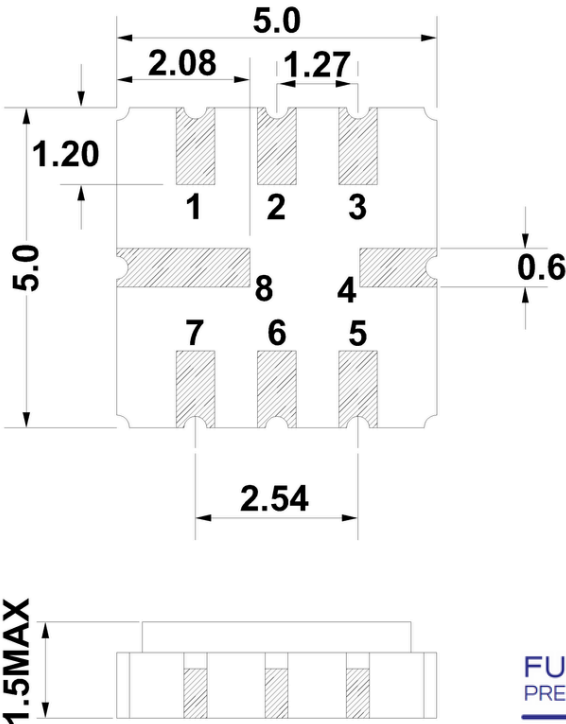
Characteristics	Test / Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	fC	-	420	-	MHz	
Minimum Insertion Loss	ILmin	-	1.4	2.8	dB	
2 dB Bandwidth	BW2	18	21.25	-	MHz	Relative to ILmin
Absolute Attenuation	320-375 MHz	40	56	-	dB	From 0 dB
Absolute Attenuation	465-475 MHz	30	56	-	dB	From 0 dB
Absolute Attenuation	475-520 MHz	40	54	-	dB	From 0 dB
Operating Temperature	TA	0	-	+50	°C	
Storage Temperature	Tstg	-40	-	+85	°C	
Test Source Impedance		-	50	-	Ω	Single-ended
Test Load Impedance		-	50	-	Ω	Single-ended

 DIMENSION(mm)

Measurement uses 50 Ω source and load impedances. These are test terminations, not device impedances. ILmin is the minimum passband insertion loss. fC is the mean of the two frequencies at ILmin + 2 dB. Stopband attenuation is absolute, referenced to 0 dB. No amplitude-ripple limit is specified.

Pin No.	Description
2	Input/Output
6	Input/Output
1, 3, 5,7	To Be Ground
4, 8	Case Ground

Please contact FCom for other pin configurations.

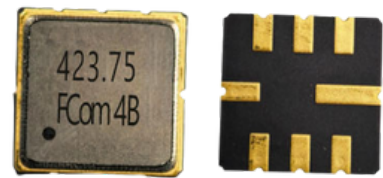


FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-423M75

8-SMD, No Lead 5.0x5.0 mm



Feature

- Package: 5.0 × 5.0 mm; height: 1.5 mm max.
- Specified passband: 421.5-426 MHz
- Operating temperature: -40 to +85°C
- Maximum input power: 15 dBm; DC: 0 V
- 50 Ω source / load test environment

Application

- RF signal selection at 423.75 MHz
- Receiver front-end bandpass filtering
- Band selection in custom receiver designs

ELECTRICAL SPECIFICATIONS

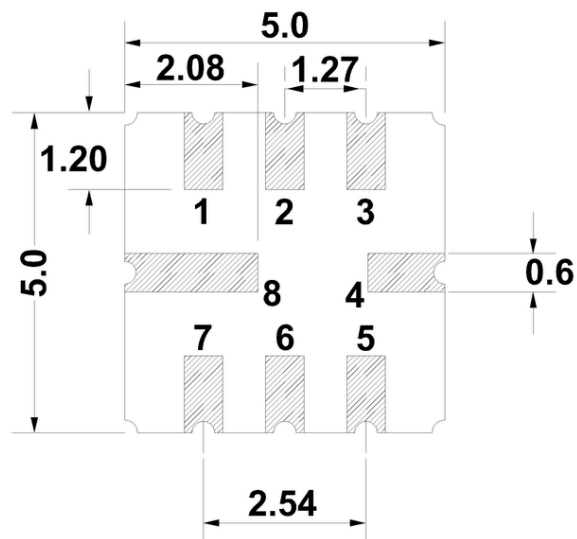
Characteristics	Test / Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _C	-	423.75	-	MHz	
Insertion Loss	421.5-426 MHz	-	2.0	3.5	dB	
Amplitude Ripple	421.5-426 MHz	-	0.4	2.2	dB	
VSWR	421.5-426 MHz	-	1.4	2.2	-	Dimensionless
Group Delay Ripple	421.5-426 MHz	-	55	220	ns	
Absolute Attenuation	0.3-410 MHz	45	60	-	dB	From 0 dB
Absolute Attenuation	411.5-416 MHz	15	50	-	dB	From 0 dB
Absolute Attenuation	450-480 MHz	45	63	-	dB	From 0 dB
Absolute Attenuation	480-1000 MHz	40	56	-	dB	From 0 dB
Absolute Attenuation	1000-2000 MHz	23	27	-	dB	From 0 dB
Frequency Temp. Coeff.	TCF	-	-36	-	ppm/K	
Operating Temperature	TA	-40	-	+85	°C	
Storage Temperature	T _{stg}	-40	-	+85	°C	
Test Source Impedance		-	50	-	Ω	Single-ended
Test Load Impedance		-	50	-	Ω	Single-ended

DIMENSION(mm)

Specified passband: 421.5-426 MHz.
 This passband is not a specified 3 dB bandwidth.
 A 3 dB bandwidth value is not provided.
 Stopband attenuation is absolute, referenced to 0 dB.
 Measurement uses 50 Ω source and load impedances.
 Maximum DC voltage: 0 V.

Pin No.	Description
2	Input/Output
6	Input/Output
1, 3, 5, 7	To Be Ground
4, 8	Case Ground

Please contact FCom for other pin configurations.

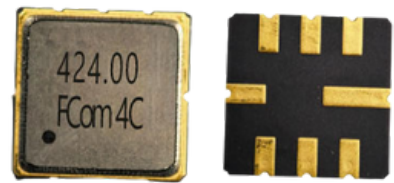


FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-424M

8-SMD, No Lead 5.0x5.0 mm



Feature

- Package: 5.0 × 5.0 mm; height: 1.5 mm max.
- 2 dB bandwidth: 18 MHz min., 21.4 MHz typ.
- Operating temperature: 0 to +50°C
- Maximum input power: 20 dBm; DC: 3 V
- 50 Ω source / load test environment

Application

- RF signal selection at 424 MHz
- Receiver front-end bandpass filtering
- Band selection in custom receiver designs

ELECTRICAL SPECIFICATIONS

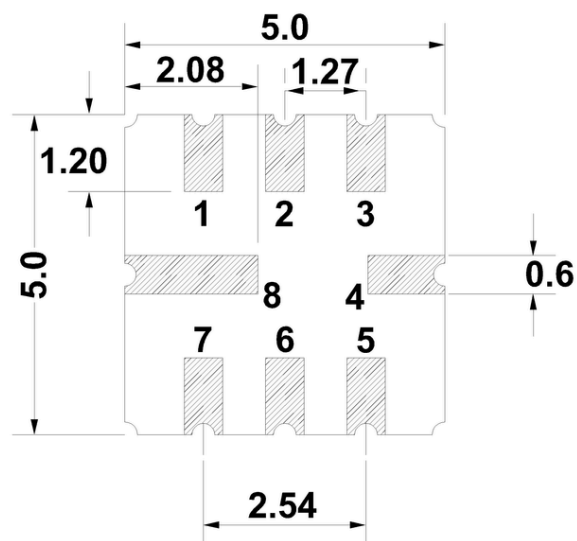
Characteristics	Test / Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _C	-	424	-	MHz	
Minimum Insertion Loss	IL _{min}	-	1.4	2.8	dB	
2 dB Bandwidth	BW ₂	18	21.4	-	MHz	Relative to IL _{min}
Absolute Attenuation	324-379 MHz	40	56	-	dB	From 0 dB
Absolute Attenuation	469-479 MHz	30	56	-	dB	From 0 dB
Absolute Attenuation	479-524 MHz	40	54	-	dB	From 0 dB
Frequency Temp. Coeff.	TCF	-	-36	-	ppm/K	
Operating Temperature	TA	0	-	+50	°C	
Storage Temperature	T _{stg}	-40	-	+85	°C	
Test Source Impedance		-	50	-	Ω	Single-ended
Test Load Impedance		-	50	-	Ω	Single-ended

DIMENSION(mm)

Test temperature: 25°C.
 Measurement uses 50 Ω source and load impedances.
 These are test terminations, not device impedances.
 IL_{min} is the minimum passband insertion loss.
 f_C is the mean of the two frequencies at IL_{min} + 2 dB.
 Stopband attenuation is absolute, referenced to 0 dB.
 No amplitude-ripple limit is specified.

Pin No.	Description
2	Input/Output
6	Input/Output
1, 3, 5, 7	To Be Ground
4, 8	Case Ground

Please contact FCom for other pin configurations.

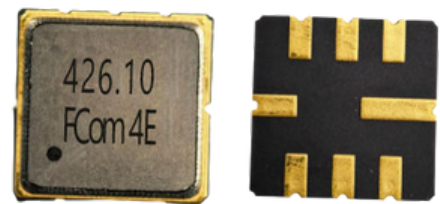


FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-426M1

8-SMD, No Lead 5.0x5.0 mm



Feature

- Package: 5.0 × 5.0 mm; height: 1.5 mm max.
- Specified passband: 426.012-426.150 MHz
- Operating temperature: -10 to +60°C
- Maximum input power: 10 dBm; DC: 5 V
- External matching required for 50 Ω testing

Application

- RF signal selection at 426.1 MHz
- Receiver front-end bandpass filtering
- Band selection in custom receiver designs

ELECTRICAL SPECIFICATIONS

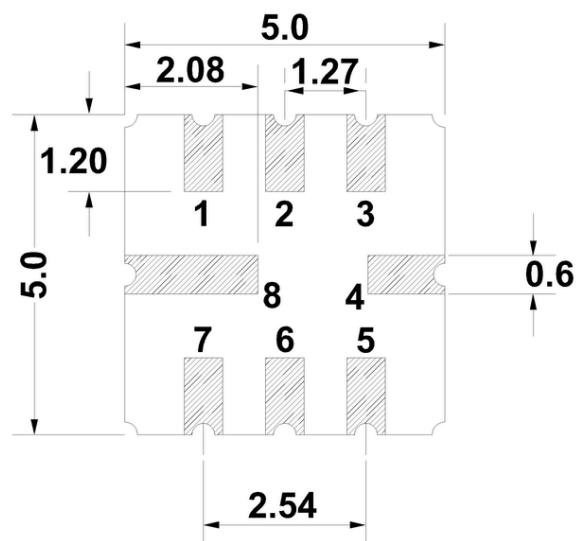
Characteristics	Test / Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _C	-	426.1	-	MHz	
Insertion Loss	426.012-426.150 MHz	-	2.5	3.5	dB	
Ripple Deviation (p-p)	426.012-426.150 MHz	-	0.1	1.5	dB	
Absolute Attenuation	382.012-384.150 MHz	50	68	-	dB	From 0 dB
Absolute Attenuation	468.012-470.150 MHz	50	68	-	dB	From 0 dB
Operating Temperature	T _A	-10	-	+60	°C	
Storage Temperature	T _{stg}	-20	-	+75	°C	
Specified Source Impedance	Z _s	-	53-j29.44	-	Ω	See notes
Specified Load Impedance	Z _L	-	53-j29.44	-	Ω	See notes
Analyzer Source		-	50	-	Ω	Single-ended
Analyzer Load		-	50	-	Ω	Single-ended

DIMENSION(mm)

Specified passband: 426.012-426.150 MHz.
 A 3 dB bandwidth value is not specified.
 Absolute stopband attenuation is referenced to 0 dB.
 The specified complex impedances are distinct from the 50 Ω source / load at the analyzer ports.
 Matching at each port: a 12 pF series capacitor and a 22 nH shunt inductor to ground on the filter side.

Pin No.	Description
2	Input/Output
6	Input/Output
1, 3, 5, 7	To Be Ground
4, 8	Case Ground

Please contact FCom for other pin configurations.



FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-427M8

8-SMD, No Lead 5.0x5.0 mm

Balanced electrical data; FCom pin configuration requires confirmation.

Feature

- Package: 5.0 × 5.0 mm; height: 1.5 mm max.
- Specified passband: 425.3-430.3 MHz
- Operating temperature: +15 to +35°C
- Maximum input power: 10 dBm; DC: 3 V
- Electrical data for 200 Ω balanced testing

Application

- RF signal selection at 427.8 MHz
- Differential RF / IF bandpass filtering
- Band selection in custom receiver designs

ELECTRICAL SPECIFICATIONS

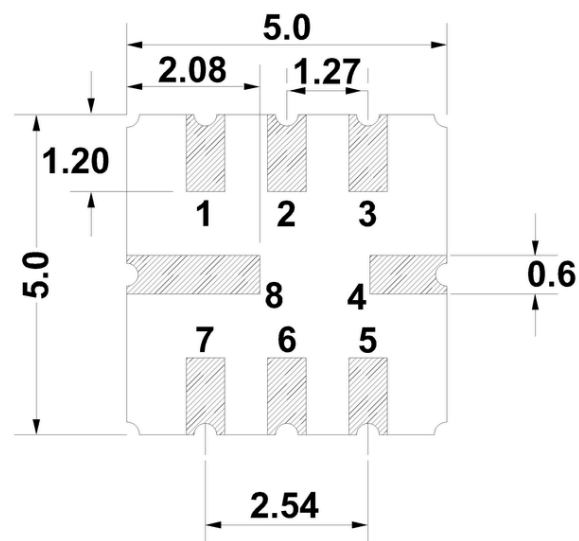
Characteristics	Test / Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _C	-	427.8	-	MHz	
Insertion Loss	425.3-430.3 MHz	-	2.05	3.6	dB	
Amplitude Ripple	425.3-430.3 MHz	-	0.65	2.1	dB	
VSWR	425.3-430.3 MHz	-	1.6	2.2	-	Dimensionless
Absolute Attenuation	1-391 MHz	40	55	-	dB	From 0 dB
Absolute Attenuation	391-406.5 MHz	31	56	-	dB	From 0 dB
Absolute Attenuation	406.5-417.9 MHz	10	40	-	dB	From 0 dB
Absolute Attenuation	461-481 MHz	35	60	-	dB	From 0 dB
Absolute Attenuation	481-555 MHz	40	62	-	dB	From 0 dB
Frequency Temp. Coeff.	TCF	-	-36	-	ppm/K	
Operating Temperature	TA	+15	-	+35	°C	
Storage Temperature	T _{stg}	-40	-	+85	°C	
Test Source Impedance		-	200	-	Ω	Balanced
Test Load Impedance		-	200	-	Ω	Balanced

DIMENSION(mm)

Specified passband: 425.3-430.3 MHz; 3 dB BW unspecified.
Electrical values require 200 Ω balanced source / load.
Stopband attenuation is absolute, referenced to 0 dB.
The supplied FCom pin table below is retained.
It describes single-ended ports, unlike the balanced configuration required for these electrical values.
Confirm balanced pin assignment and applicability with FCom before using these values in a design.

Pin No.	Description
2	Input/Output
6	Input/Output
1, 3, 5, 7	To Be Ground
4, 8	Case Ground

Please contact FCom for other pin configurations.



FUJI CRYSTAL
PRECISELY ACCURATE