

FCom SAW FILTER

Series FSF-5050-230M4

8-SMD, No Lead 5.0x5.0 mm



Feature

- SMD package: 5.0 x 5.0 mm
- Specified passband: 229.9-230.9 MHz
- Operating temperature: -40 to +85°C
- Insertion loss: 2.5 dB typ.; 3.8 dB max.

Application

- VHF receiver filtering at 230.4 MHz
- RF front-end signal selection
- IF filtering in superheterodyne receivers

ELECTRICAL SPECIFICATIONS

Characteristics	Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _c	230.4			MHz	Attenuation relative to attenuation at Fc MHz: min./typ. dB 130.4-190.4: 40 / 58 270.4-630.4: 38 / 53 630.4-730.4: 35 / 50
Insertion Loss	IL		2.5	3.8	dB	
3dB Bandwidth	BW3		-		MHz	
Amplitude Ripple (229.9~230.9 MHz)	-		0.6	1.8	dB	
Operating Temperature Range	T _A	-40		+85	°C	
Source impedance	50 Ω (test termination)					
Load impedance	50 Ω (test termination)					

! IL and ripple apply over 229.9-230.9 MHz. 3 dB bandwidth is not specified.
 Stopband attenuation is relative to attenuation at f_c (230.4 MHz), not to 0 dB or ILmin.

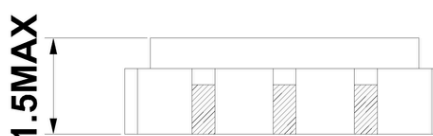
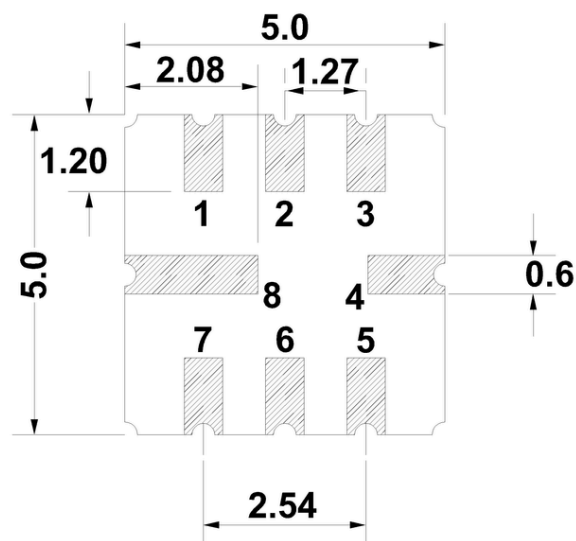
DIMENSION(mm)

TEST CONDITIONS & LIMITS

50 Ω source/load; direct test connection.
 Maximum input power: 10 dBm.
 Maximum DC voltage: 5 V.
 Storage temperature: -40 to +85°C.

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

Please contact FCom for other pin configurations.



FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-231M25

8-SMD, No Lead 5.0x5.0 mm



Feature

- SMD package: 5.0 x 5.0 mm
- Passband: 12 MHz min.; 16 MHz typ.
- Operating temperature: -40 to +85°C
- Insertion loss: 2.0 dB typ.; 3.5 dB max.

Application

- VHF receiver filtering at 231.25 MHz
- RF front-end signal selection
- IF filtering in superheterodyne receivers

ELECTRICAL SPECIFICATIONS

Characteristics	Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _c	231.25			MHz	Attenuation from 0 dB MHz: min./typ. dB 10-195: 38 / 42 268.75-330: 35 / 43 330-950: 18 / 24
Insertion Loss	IL		2.0	3.5	dB	
Passband width	BW	12	16		MHz	
Amplitude Ripple (225.25~237.25 MHz)	-		0.6	1.5	dB	
Operating Temperature Range	T _A	-40		+85	°C	
Source impedance	50 Ω (test termination)					
Load impedance	50 Ω (test termination)					

! IL, ripple and delay apply over 225.25-237.25 MHz. Attenuation is referenced to 0 dB.
 Passband width has no specified attenuation threshold; it is not defined as 3 dB bandwidth.

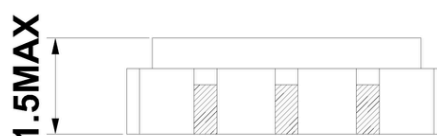
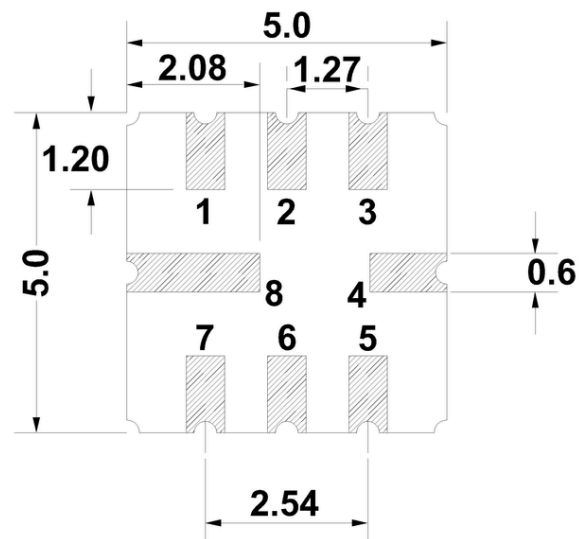
DIMENSION(mm)

TEST CONDITIONS & LIMITS

50 Ω source/load; direct test connection.
 Delay over 225.25-237.25 MHz (typ./max.):
 Absolute: 70 / 150 ns; group-delay ripple: 30 / 70 ns.
 Frequency temperature coefficient: -75 ppm/°C typ.
 Maximum input: 10 dBm; DC voltage: 5 V.
 Storage temperature: -40 to +85°C.

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

Please contact FCom for other pin configurations.



FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-232M5

8-SMD, No Lead 5.0x5.0 mm



Feature

- SMD package: 5.0 x 5.0 mm
- Specified passband: 230.8-234.2 MHz
- Operating temperature: -20 to +65°C
- Insertion loss: 2.0 dB typ.; 3.0 dB max.

Application

- VHF receiver filtering at 232.5 MHz
- RF front-end signal selection
- IF filtering in superheterodyne receivers

ELECTRICAL SPECIFICATIONS

Characteristics	Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _c	232.5			MHz	Attenuation from 0 dB MHz: min./typ. dB 252.4-255.3: 45 / 58 462-467.8: 48 / 52 693-703.75: 35 / 47
Insertion Loss	IL		2.0	3.0	dB	
3dB Bandwidth	BW3		-		MHz	
Amplitude Ripple (230.8~234.2 MHz)	-		1.5	2.0	dB	
Operating Temperature Range	T _A	-20		+65	°C	
Source impedance	50 Ω (test termination)					
Load impedance	50 Ω (test termination)					

! IL and ripple apply over 230.8-234.2 MHz. 3 dB bandwidth is not specified.
 Stopband attenuation is referenced to 0 dB. 50 Ω denotes source/load test termination.

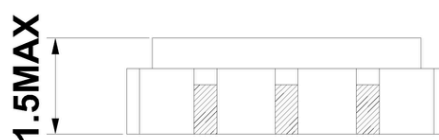
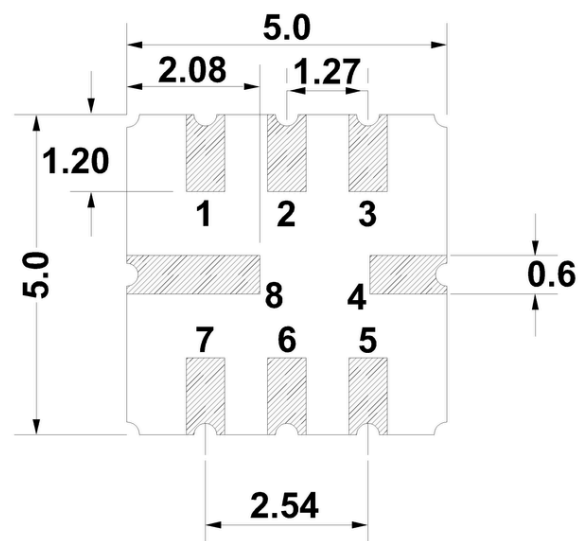
DIMENSION(mm)

TEST CONDITIONS & LIMITS

50 Ω source/load; direct test connection.
 VSWR (230.8-234.2 MHz): 2.1 typ.; 2.5 max.
 Frequency temperature coefficient: -36 ppm/°C typ.
 Maximum input: 10 dBm; DC voltage: 5 V.
 Storage temperature: -40 to +85°C.

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

Please contact FCom for other pin configurations.



FUJI CRYSTAL
PRECISELY ACCURATE

FCom SAW FILTER

Series FSF-5050-234M

8-SMD, No Lead 5.0x5.0 mm



Feature

- SMD package: 5.0 x 5.0 mm
- Specified passband: 233-235 MHz
- Operating temperature: -45 to +85°C
- Insertion loss: 2.1 dB typ.; 3.3 dB max.

Application

- VHF receiver filtering at 234 MHz
- RF front-end signal selection
- IF filtering in superheterodyne receivers

ELECTRICAL SPECIFICATIONS

Characteristics	Symbol	Min.	Typ.	Max.	Units	Notes
Center Frequency	f _c	234.0			MHz	Attenuation from 0 dB MHz: min./typ. dB 0.3-226: 40 / 50 226-228: 35 / 47 228-229: 18 / 33 239-240: 15 / 22 240-250: 30 / 34 250-300: 40 / 44
Insertion Loss	IL		2.1	3.3	dB	
3dB Bandwidth	BW3		-		MHz	
Amplitude Ripple (233~235 MHz)	-		0.8	2.0	dB	
Operating Temperature Range	T _A	-45		+85	°C	
Source impedance	50 Ω (test termination)					
Load impedance	50 Ω (test termination)					

! IL and ripple apply over 233-235 MHz. 3 dB bandwidth is not specified.
 Stopband attenuation is referenced to 0 dB. 50 Ω denotes source/load test termination.

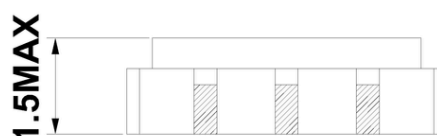
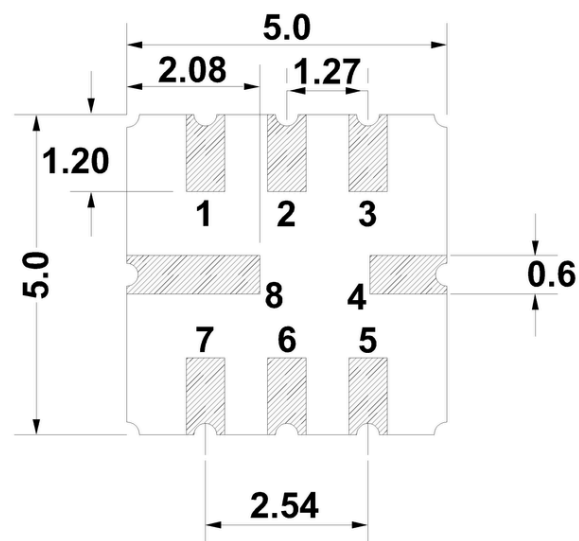
DIMENSION(mm)

TEST CONDITIONS & LIMITS

50 Ω single-ended source/load termination.
 Frequency temperature coefficient: -36 ppm/°C typ.
 Maximum input power: 20 dBm.
 Maximum DC voltage: 10 V.
 Storage temperature: -45 to +85°C.

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

Please contact FCom for other pin configurations.



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