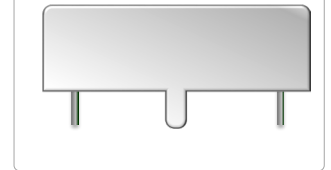


# FTF4853

## Monolithic Crystal Filter

Part number: 4853 | Revision: W1 | Date: 25 January 2023



### 1.0 Main parameters

N°	Characteristics	Symbol	Value	Unit	Note
1.1	Nominal centre frequency	fc	21.4	MHz	
1.2	Number of poles		10		

### 2.0 Insection loss

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
2.1	Insertion Loss (IL)	IL			4.0	dB	Measured on smallest attenuation in pass band

### 3.0 Passband

N°	Characteristics	Symbol	Nom.	Unit	-Δ F <sub>min</sub>	+Δ F <sub>max</sub>	Unit	Note
3.1	Bandwidth between 3dB frequencies		3	dB	-7.5	+7.5	kHz	

### 4.0 Ripple over

N°	Characteristics	Symbol	Nom.	Unit	-Δ F <sub>min</sub>	+Δ F <sub>max</sub>	Unit	Note
4.1	Ripple over		≤2.0	dB	-6	+6	kHz	Referred to f <sub>c</sub>

### 5.0 Stopband

N°	Characteristics	Symbol	Nom.	Unit	-Δ F <sub>min</sub>	+Δ F <sub>max</sub>	Unit	Note
5.1	StopBand 1		≥70	dB	-15	+15	kHz	Referred to f <sub>c</sub> /except spurious
5.2	StopBand 2		≥80	dB	-20	+500	kHz	Referred to f <sub>c</sub> /except spurious

### 6.0 Matching

N°	Characteristics	Symbol	Resistance	Unit	Capacitance	Unit	Note
6.1	Input and output		50	Ω	0	pF	

### 7.0 Temperature range

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
7.1	Operating	OTR	-20		70	°C	
7.2	Storage	STR	-55		85	°C	

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### 8.0 Package and marking

N°	Characteristics	Specifications	Model outline drawing
8.1	Package type	5M (23.0 x 12.2 mm max)	
8.2	Package height	15.1 mm max	
8.3	Pin length	4.0 mm max	
8.4	Marking	Line 1: RAKON YYWW Line 2: FTF4853/21.4MHz	

Unit: mm

### 9.0 Test circuit

N°	Test circuit diagram
11.1	

### 10.0 Specification History

Revision	Change notes	Date
W0	Preliminary Datasheet creation	Jul, 1 <sup>st</sup> 2014
W1	Re-branding Rakon to RakonXpress	Jan, 25 <sup>th</sup> 2023