

# FTF4848

## Monolithic Crystal Filter

Part number: 4848 | Revision: W2 | Date: 25 January 2023



### 1.0 Main parameters

N°	Characteristics	Symbol	Value	Unit	Note
1.1	Nominal centre frequency	fc	70.0	MHz	
1.2	Number of poles		2		

### 2.0 Insection loss

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
2.1	Insertion Loss (IL)	IL			5	dB	Measured on smallest attenuation in pass band

### 3.0 Passband

N°	Characteristics	Symbol	Nom.	Unit	- $\Delta F_{min}$	+ $\Delta F_{max}$	Unit	Note
3.1	Bandwidth between 3dB frequencies		3	dB	-12.5	+12.5	kHz	Referred to fc

### 4.0 Ripple over

N°	Characteristics	Symbol	Nom.	Unit	- $\Delta F_{min}$	+ $\Delta F_{max}$	Unit	Note
4.1	Ripple over		$\leq 1$	dB				

### 5.0 Stopband

N°	Characteristics	Symbol	Nom.	Unit	- $\Delta F_{min}$	+ $\Delta F_{max}$	Unit	Note
5.1	StopBand		$\geq 30$	dB	-120	+120	kHz	
5.2	Alternate attenuation		$\geq 45$	dB				Except spurious

### 6.0 Matching

N°	Characteristics	Symbol	Resistance	Unit	Capacitance	Unit	Note
6.1	Input and output		50	$\Omega$	0	pF	

### 7.0 Input level

N°	Characteristics	Symbol	Value	Unit	Note
7.1	Operating		0	dBm	
7.2	Before destruction		+15	dBm	

### 8.0 Temperature range

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
7.1	Operating	OTR	-40		85	$^{\circ}\text{C}$	
7.2	Storage	STR	-45		85	$^{\circ}\text{C}$	

### 9.0 Group delay

N°	Characteristics	Symbol	Nom.	Unit	- $\Delta F_{min}$	+ $\Delta F_{max}$	Unit	Note
9.1	Differential group delay			$\mu\text{s}$			kHz	To be confirmed after sampling

# FTF4848

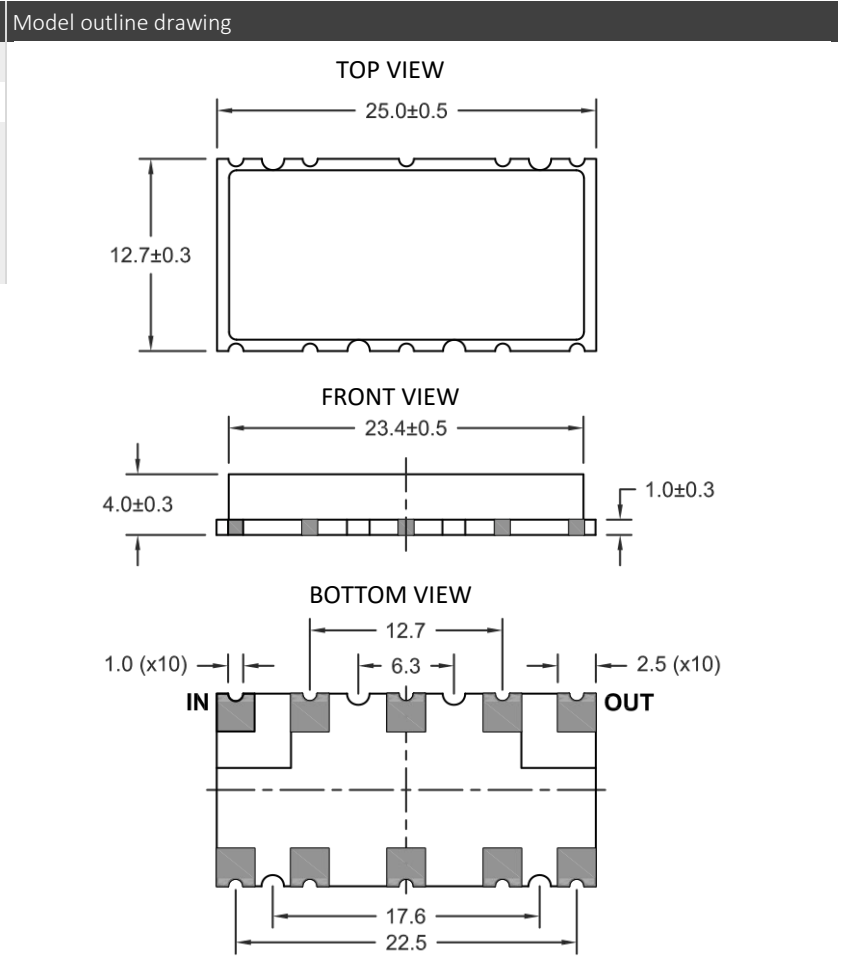
Monolithic Crystal Filter



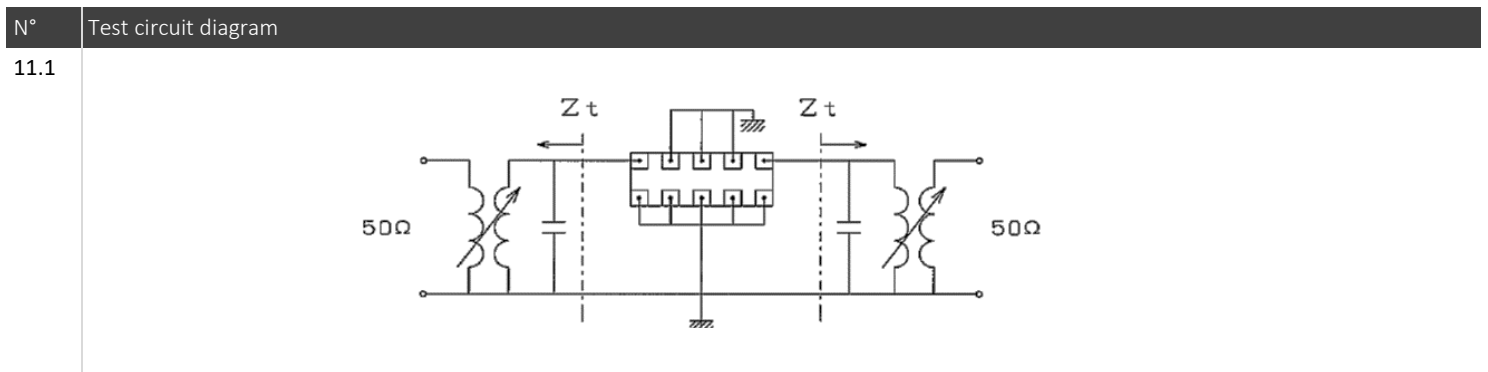
Part number: 4848 | Revision: W2 | Date: 25 January 2023

## 10.0 Package and marking

N°	Characteristics	Specifications
10.1	Package type	21S100A SMD (25.0 x 12.7 mm)
10.2	Package height	4.3 mm max
10.3	Marking	Line 1: RAKON YYWW Line 2: FTF4848/70.0MHz



## 11.0 Test circuit



## 12.0 Specification History

Revision	Change notes	Date
W1	Preliminary Datasheet creation	Mar, 15 <sup>th</sup> 2015
W2	Re-branding Rakon to RakonXpress	Jan, 25 <sup>th</sup> 2023