

FTF1858

Monolithic Crystal Filter

Part number: 1858 | Revision: A1 | Date: 22 January 2023



1.0 Main parameters

N°	Characteristics	Symbol	Value	Unit	Note
1.1	Reference frequency	fr	75	MHz	Number of poles: 4
1.2	Centre frequency	fc	75	MHz	

2.0 Insection lose

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
2.1	Insertion Loss (IL)	IL		4		dB	Referenced to max of transmission

3.0 Passband

N°	Characteristics	Symbol	Nom.	Unit	- ΔF_{min}	+ ΔF_{max}	Unit	Note
3.1	Bandwidth 1		3	dB	-7.5	+7.5	kHz	Reference to fr

4.0 Ripple over

N°	Characteristics	Symbol	Nom.	Unit	- ΔF_{min}	+ ΔF_{max}	Unit	Note
4.1	Ripple over		≤0.5	dB			kHz	Peak to peak

5.0 Stopband

N°	Characteristics	Symbol	Nom.	Unit	- ΔF_{min}	+ ΔF_{max}	Unit	Note
5.1	StopBand 1		≥25	dB	-20	+20	kHz	
5.2	StopBand 2		≥50	dB	-50	+50	kHz	Over ±300 kHz
5.3	StopBand 2		≥55	dB				Ultimate attenuation

6.0 Spurious

N°	Characteristics	Symbol	Nom.	Unit	- ΔF_{min}	+ ΔF_{max}	Unit	Note
6.1	Spurious 1		≥30	dB	+70	+1000	kHz	

7.0 Matching

N°	Characteristics	Symbol	Resistance	Unit	Capacitance	Unit	Note
7.1	Source	Mc	50	Ω	0	pF	
7.2	Load	ML	50	Ω	0	pF	

8.0 Input level

N°	Characteristics	Symbol	Value	Unit	Note
8.1	Operating		-10	dBm	
8.2	Before destruction		0	dBm	

9.0 Temperature range

N°	Characteristics	Symbol	Min.	Nom.	Max.	Unit	Note
9.1	Operating	OTR	-40	25	90	°C	
9.2	Storage	STR	-55		125	°C	

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10.0 Group delay

N°	Characteristics	Symbol	Nom	Unit	Value	Note
10.1	Absolute group delay at frequency F		50		0	Max

11.0 Mechanical conditions

N°	Test Item	Test Conditions
14.1	Shock	50g/11ms according IEC 68-2-27
14.2	Vibration	Mil STB 810 B-J curve: 5-2000Hz

12.0 Package and marking

N°	Characteristics	Specifications	Model outline drawing
8.1	Package Ref	F12-2	
8.2	Package Type	BF12	
8.3	Package height	11 mm man.	

13.0 Specification History

Revision	Change notes	Date
A0	Preliminary Datasheet creation	Feb, 13 th 2015
A1	Re-branding Rakon to RakonXpress	Jan, 22 nd 2023