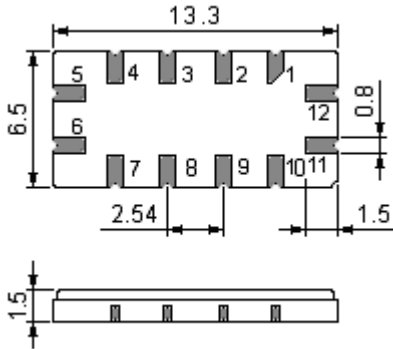


The **ACTF2081-70.00-SMP-53** is a high performance IF bandpass filter in a surface-mount ceramic **SMP-53** case with center frequency **70.00 MHz**.

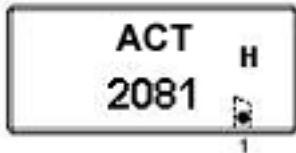
1. Package Dimension (SMP-53)



Pin	Configuration
5	Input-Ground
6	Input
11	Output-Ground
12	Output
Others	be grounded

Unit: mm

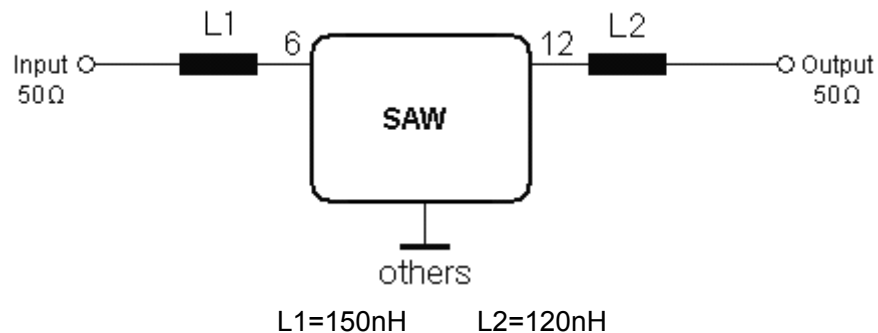
2. Marking



- The logo "ACT" indicates our product's mark
- The character "F" indicates the type of SAW component. Including: F (filter), R (resonator) etc.
- The "2081" indicates the model name of SAW component
- The dot "•" indicates terminal 1
- The character "H" indicates the month code in a year

	1	2	3	4	5	6	7	8	9	10	11	12
2009	A	B	C	D	E	F	G	H	J	K	L	M
2010	N	P	Q	R	S	T	U	V	W	X	Y	Z
2011	a	b	c	d	e	f	g	h	j	k	l	m
2012	n	p	q	r	s	t	u	v	w	x	y	z

3. Matching Network (Input and output unbalanced)



In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice 1

ISO9001:2000 Registered

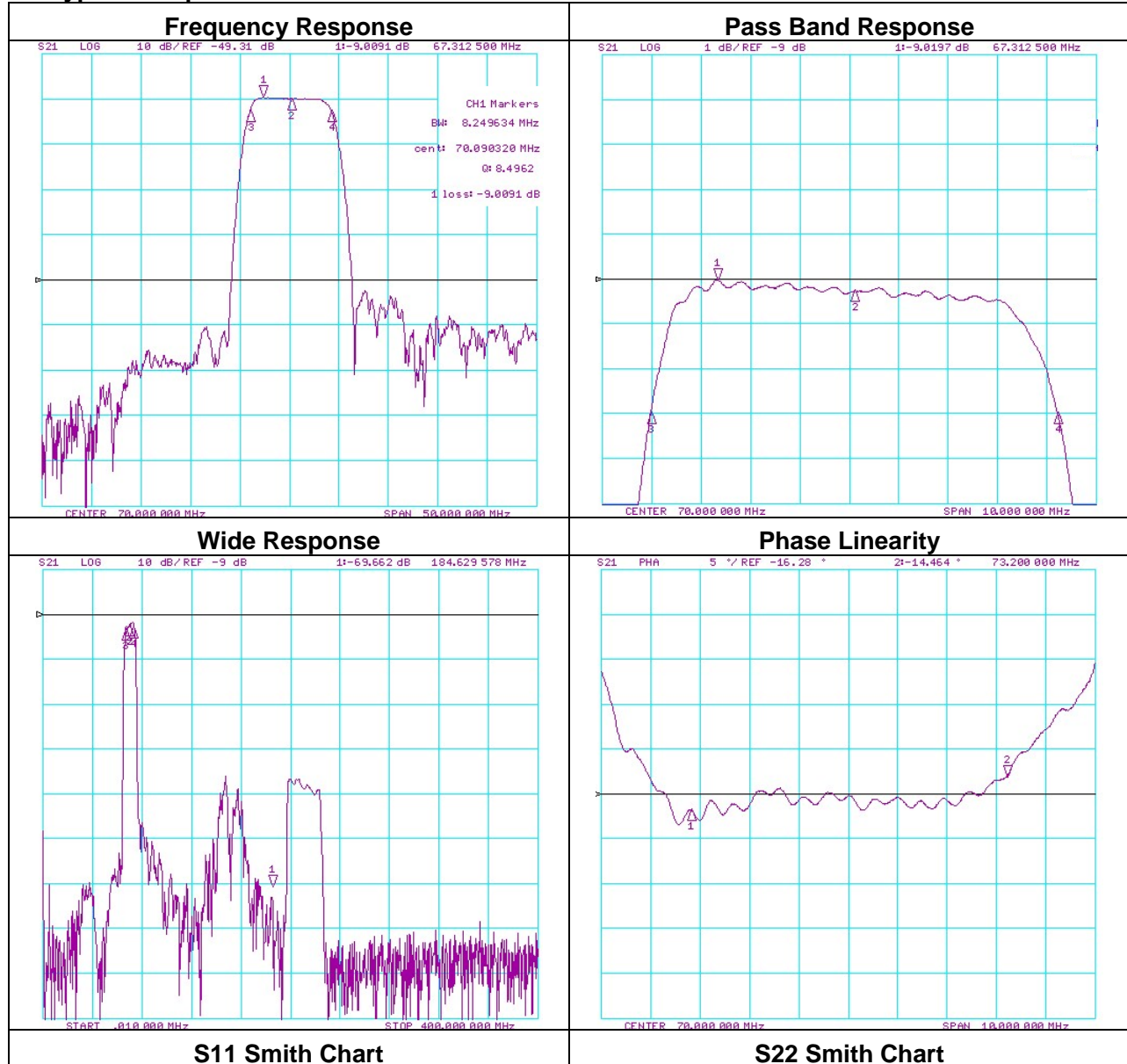
For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

(Notes: Component values may change depending on board layout.)

4. Typical Response



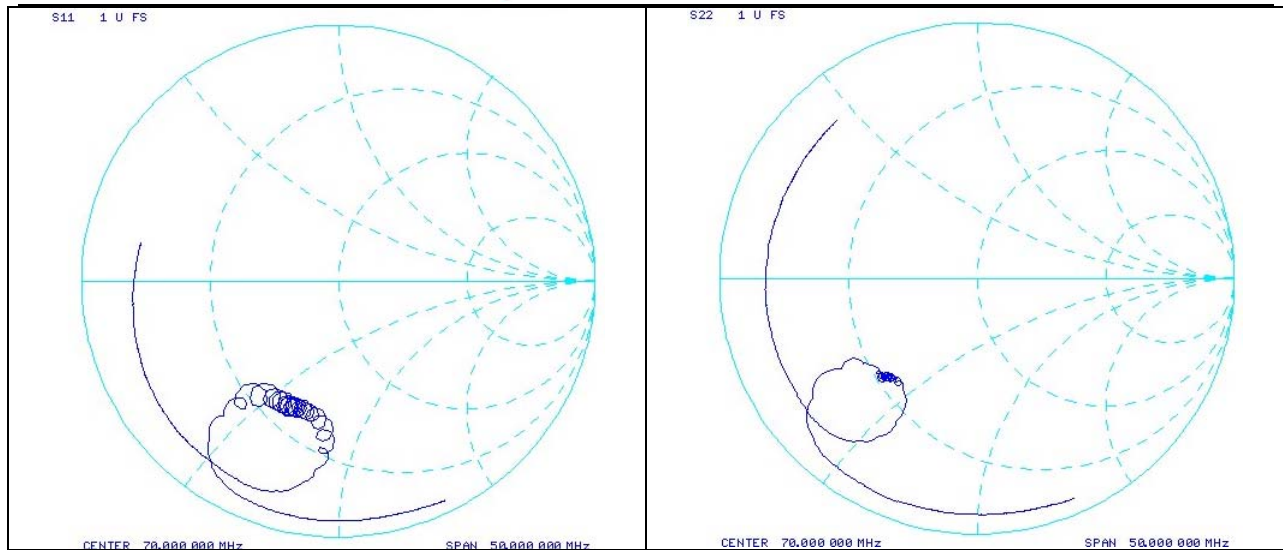
In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice 2

ISO9001:2000 Registered

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5. Performance

5-1. Maximum Ratings

Rating		Value	Unit
Source Power (s. imp. 50Ω, duty cycle 1:100)	P_S	20	dBm
Source Power (source impedance 50Ω)	P_S	10	dBm
DC Voltage	V_{DC}	0	V
Storage Temperature Range	T_{stg}	-40 to +85	°C
Operating Temperature Range	T_A	-40 to +85	°C

5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit	
Center Frequency	f_c	--	70.0	--	MHz	
Insertion Loss (@70.00MHz)	IL	--	9.0	11.0	dB	
Passband	-1dB passband	7.10	7.25	14.25	MHz	
	-3dB passband		8.0		8.20	MHz
	-40dB passband				13.25	MHz
Amplitude Ripple(66.8-73.2MHz)			0.8	1.0	dB	
Source/Load Impedance			50		Ω	
Phase Linearity (66.8-73.2MHz)			9.0	12	degree	
Group Delay at f_c (@25□)	τ_c		1.05	--	μs	
Group Delay Ripple (p-p)(66.8-73.2MHz)	$\Delta\tau$	--	50	100	ns	
Temperature Coefficient of Frequency	TC_f	--	-94	--	ppm/K	

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ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

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1. The frequency f_c is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
3. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
4. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.