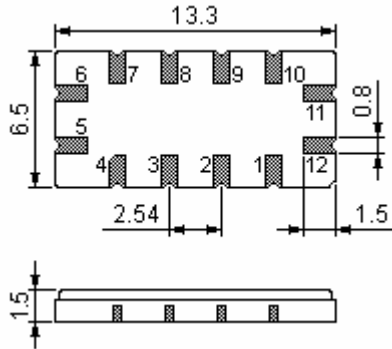


The **ACTF2068-140-SMP53** is a high performance IF band pass filter in a surface-mount ceramic **SMP-53** case with center frequency **140.00 MHz**.

1. Package Dimension (SMP-53)



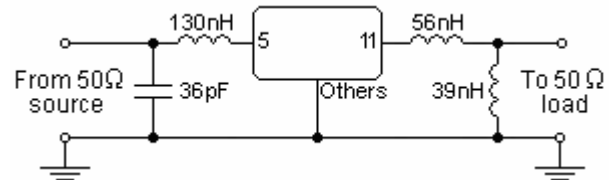
Pin	Configuration
5	Input or balanced Input
6	Input-Ground or balanced Input
11	Output or balanced Output
12	Output-Ground or balanced Output
Others	be grounded

Unit: mm

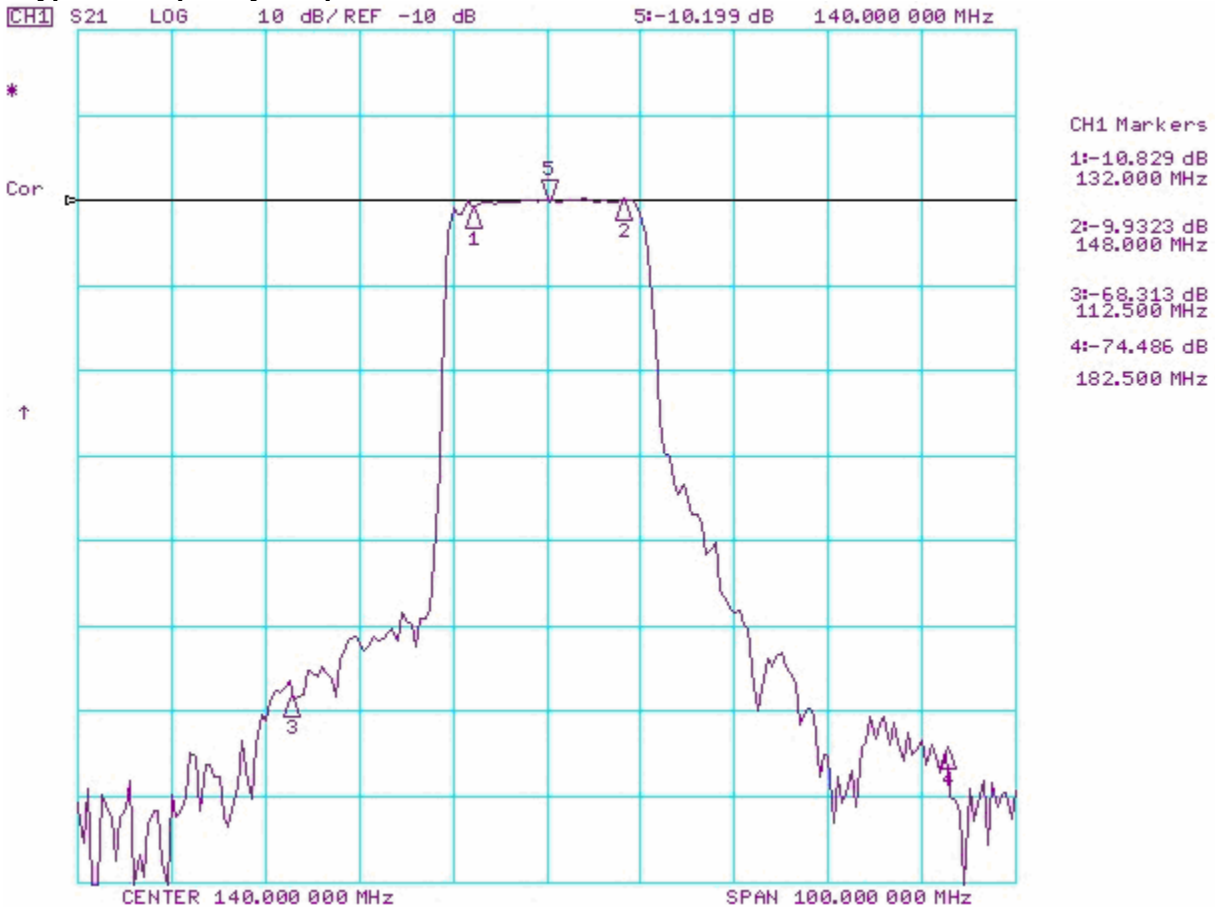
2. Marking

Laser Marking

3. Matching Network (Input and output unbalanced)



4. Typical Frequency Response



Iss1 C1u, Date 13-7-2011

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice. For quotations or further information please contact us at: The Busines Centre, Molly Millars Lane, Wokingham, Berkshire RG41 2EY, UK.

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	--	140.00	--	MHz
Insertion Loss (@140.00MHz)	IL	--	--	13	dB
3dB Bandwidth	BW_3	18	--	--	MHz
Amplitude Ripple 132.00 148.00 MHz	$\Delta\alpha$	--	0.5	0.9	dB
Phase Ripple (p-p) 132.00.... 148.00 MHz	$\Delta\phi$	--	7	14	°
Relative Attenuation (relative to IL) 102.50 112.50 MHz 180.18 195.18 MHz	α_{rel}	46 50	56 60	-- --	dB dB
Group Delay at f_C (@25□)	T_C	1.18	1.23	1.30	μs
Group Delay Ripple (p-p) 132.00 148.00 MHz	ΔT	--	80	140	ns
Temperature Coefficient of Frequency	TC_f	--	-87	--	ppm/K

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

1. The frequency f_C is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR≤1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_C . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. 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.