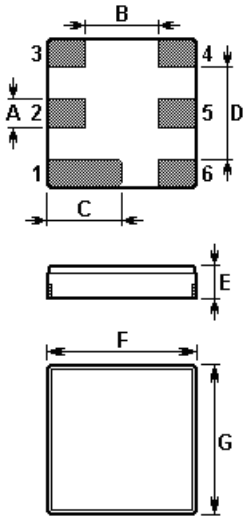
Advanced crystal technology

Tel : 0044 (0) 118 979 1238
Fax : 0044 (0) 118 979 1283
email : info@actcrystals.com

The **ACTF4096-433.92MHz-DCC6C** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **DCC6C** case for remote control applications.

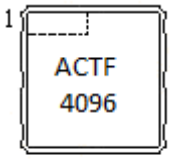
1. Package Dimension (DCC6C)



Pin	Configuration
2	Input / Output
5	Output / Input
1, 3, 4, 6	Case Ground

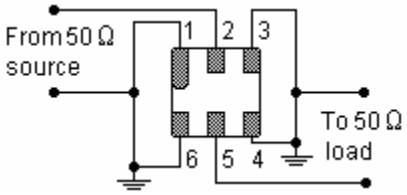
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	0.6	E	1.3
B	1.5	F	3.0
C	1.5	G	3.0
D	1.8		

2. Marking



Laser Printing, Top View

3. Matching Circuit



3. Maximum Ratings

Rating		Value	Unit
Source Power	P_S	13	dBm
DC Voltage	V_{DC}	6	V
Storage Temperature Range	T_{stg}	-45 to +125	℃
Operating Temperature Range	T_A	-45 to +125	℃

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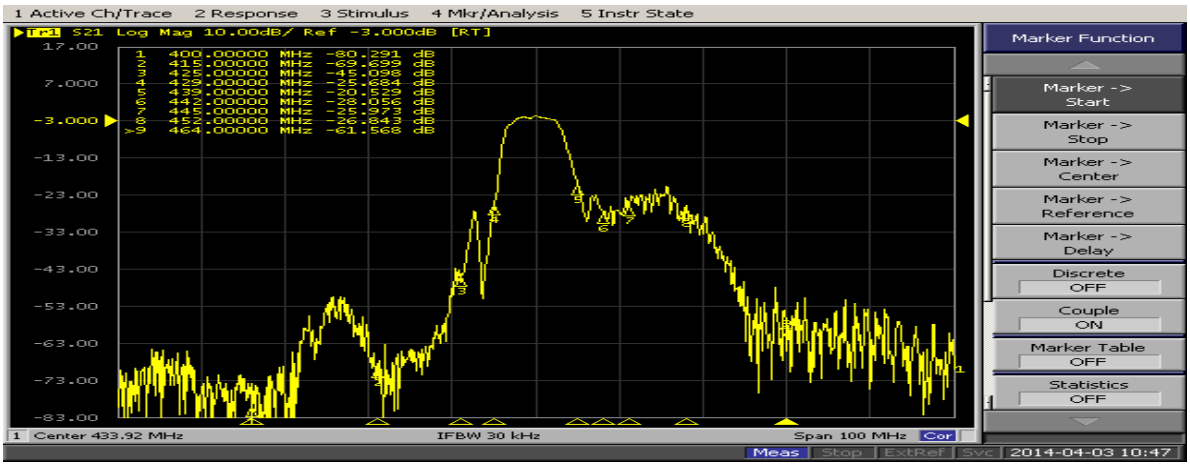
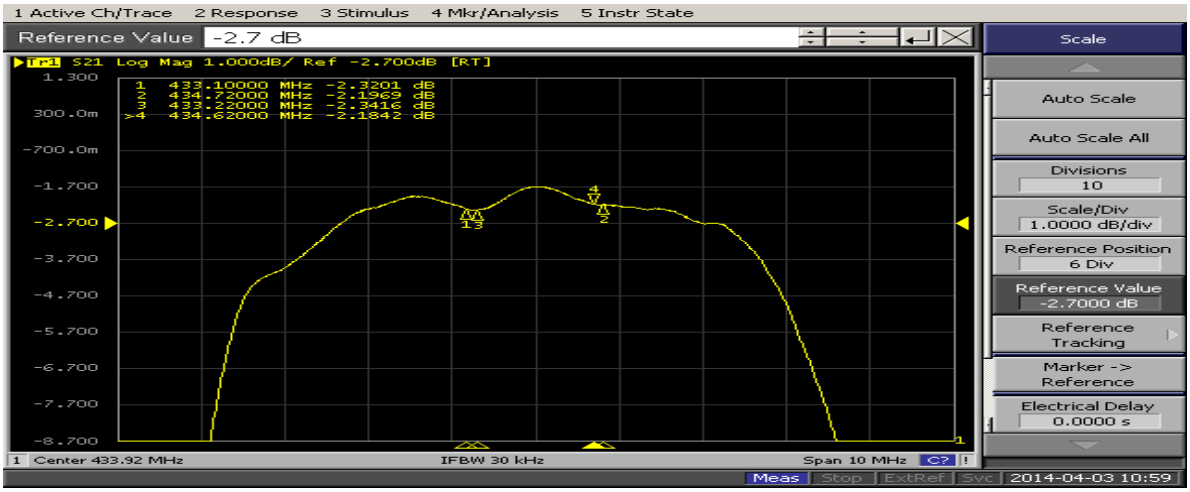
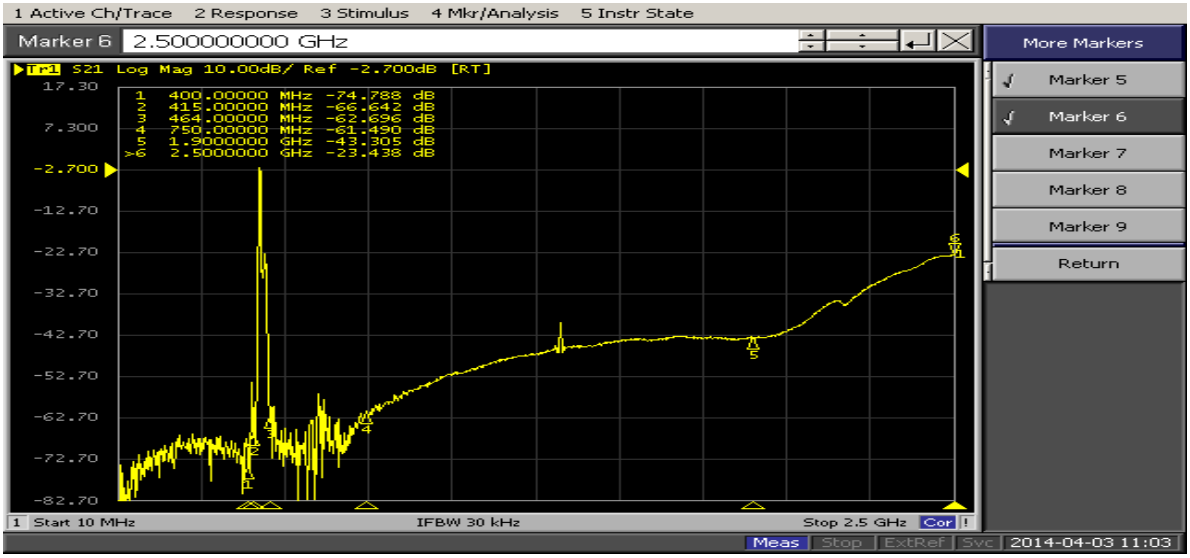
4. Typical Frequency Response







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

ISO9001 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

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5. Electronic Characteristics

Temperature range for specification : -40 – 85C

Characteristic		Minimum	Typical	Maximum	Unit
Center Frequency	f_C		433.920		MHz
Insertion Loss 433.10 …. 434.72 MHz	*IL*		 2.3	 3.2	 dB
Amplitude Ripple 433.10 …. 434.72 MHz	*Δα*		 0.6	 1.3	 dB
Attenuation	*α*				
10.00 …. 400.00 MHz		55	65		dB
400.00 …. 415.00 MHz		50	57		dB
415.00 …. 425.00 MHz		43	48		dB
425.00 …. 429.00 MHz		20	25		dB
439.00 …. 442.00 MHz		12 [1)]	22		dB
442.00 …. 445.00 MHz		18	23		dB
445.00 …. 452.00 MHz		18	20		dB
452.00 …. 464.00 MHz		22	26		dB
464.00 …. 750.00 MHz		48	52		dB
750.00 …. 1900.00 MHz		30	40		dB
1900.00 …. 2500.00 MHz		20	30		dB
Temperature Coefficient of Frequency	TC_f		-30		ppm/K

1) T=+25℃: 20dB

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

6. Stability Characteristics

	Test item	Condition of test
1	Mechanical shock	(a) Drops: 3 times on concrete floor (b) Height: 1.0 m
2	Vibration resistance	(a) Frequency of vibration: 10~55Hz (b) Amplitude: 1.5 mm (c) Directions: X,Y and Z (d) Duration: 2 hours
3	Moisture resistance	(a) Condition: 40°C, 90~95% R.H. (b) Duration: 96 hours (c) Wait 4 hours before measurement
4	Climatic sequence	(a) +70°C for 16 hours (b) +55°C for 24 hours, 90~95% R.H. (c) -25°C for 2 hours (d) +40°C for 24 hours, 90~95% R.H. (e) Wait 4 hours before measurement
5	High temperature exposure	(a) Temperature: 70°C (b) Duration: 250 hours (c) Wait 4 hours before measurement
6	Thermal impact	(a) +70°C for 30 minutes ⇒ -25°C for 30 minutes repeated 3 times (b) Wait 4 hours before measurement

Requirements: The SAW filer shall remain within the electrical specifications after tests.

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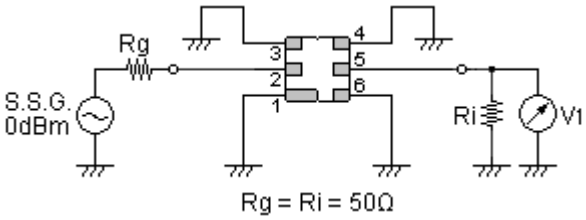
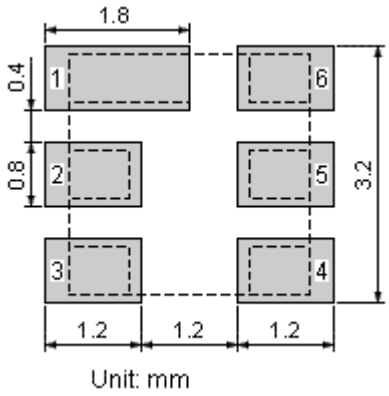
7. Test Circuit



8. Recommended Land Pattern



9. Recommended Soldering Profile