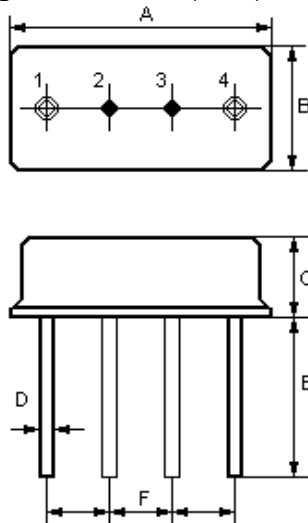


The **ACTF410B/410.0/F11** is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a low-profile metal **F-11** case for FRS & PMR mobile radio applications.  
 ( Centre frequency : 410.0MHz )

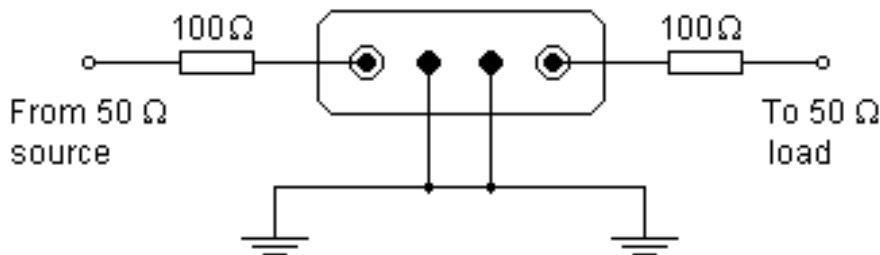
### 1. Package Dimension (F-11)



Pin	Configuration
1	Input / Output
4	Output / Input
2/3	Case Ground

Dimensions	Data (unit: mm)
A	11.0±0.3
B	4.5±0.3
C	3.2±0.3
D	0.45±0.1
E	5.0±0.5
F	2.54±0.2

### 3. Test Circuit



In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

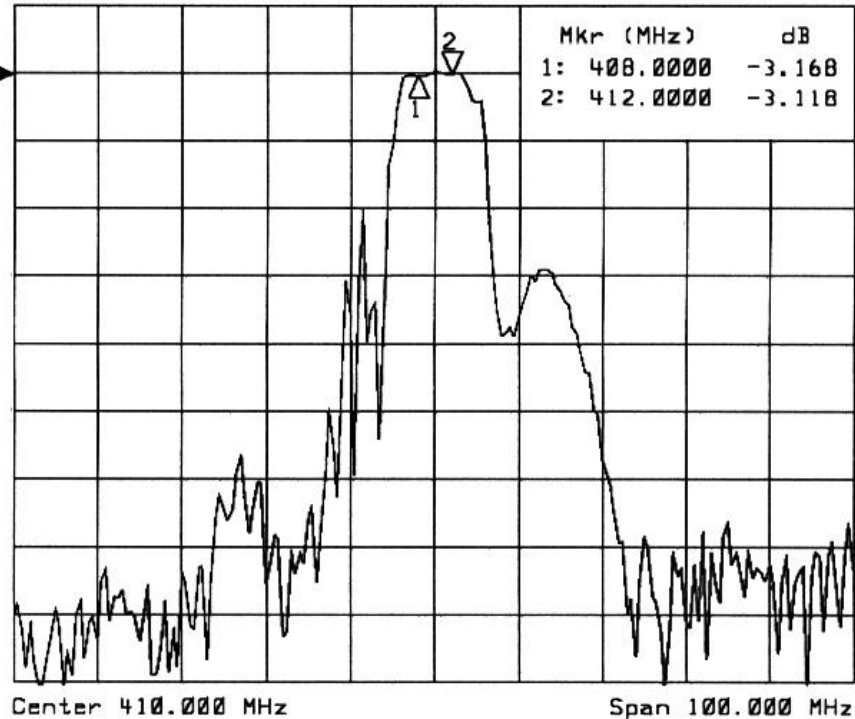
**ISO9001: 2000 Registered**

**For quotations or further information please contact us at:**  
**3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK**  
<http://www.actcrystals.com>

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#### 4. Typical Frequency Response

►1: Transmission /M Log Mag 10.0 dB/ Ref -3.00 dB  
 ►2: Off



#### 5. Performance

##### 5-1. Maximum Ratings

Rating		Value
RF Power Dissipation	$P$	0dBm
DC Voltage	$V_{DC}$	10V
AC Voltage	$V_{AC}$	10V 50Hz/60Hz
Operable Temperature Range	$T_A$	-20 to +60°C
Storage Temperature Range	$T_{stg}$	-40 to +85°C

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## 5-2.Electronic Characteristics

Characteristic	Minimum	Typical	Maximum	Unit
Centre Frequency $f_c$	--	410.000	--	MHz
User Signal Band $BW$	--	$\pm 2.0$	--	MHz
Insertion Loss $f_c \pm 2.0\text{MHz}$ $IL$	--	3.2	4.5	dB
Absolute Attenuation $\alpha$ DC to $f_c - 15.0\text{MHz}$ $f_c + 25.0\text{MHz}$ to $f_c + 200.0\text{MHz}$	45 52	55 65	-- --	dB
Pass Band Ripple $f_c \pm 2.0\text{MHz}$ $\Delta\alpha$	--	--	2.0	dB
Input / Output Impedance (Nominal)	150 $\Omega$ // 0pF			

### **i 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 50  $\Omega$  test system with VSWR  $\leq 1.2:1$ . The test fixture L and C are adjusted for minimum insertion loss at the filter centre 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.

In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

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