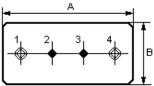
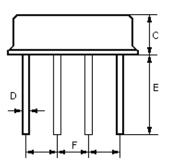


Tel : +44 118 979 1238 Fax : +44 118 979 1283 Email: <u>info@actcrystals.com</u>

The ACTF458C/458.0/F11 is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a low-profile metal F-11 case, for mobile radio applications, with a centre frequency of 458.000 MHz.

## 1. Package Dimension (F-11)





2.					
Pin	Configuration				
1	Input / Output				
4	Output / Input				
2/3	Case Ground				
Dimensions	Data (unit: mm)				
А	11 0 0 2				
~	11.0±0.3				
В	4.5±0.3				

0.45±0.1

5.0±0.5

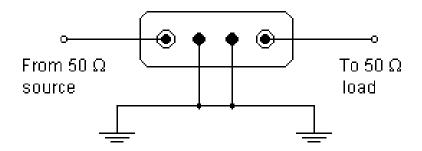
2.54±0.2

D

Е

F

3. Test Circuit



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

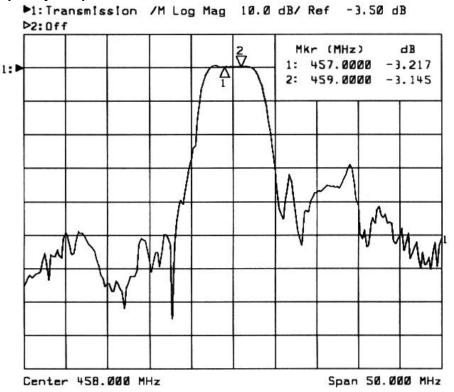
ISO9001: 2000 Registered - Registration number 6830/2 For quotations or further information please contact us at: 3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK <u>http://www.actcrystals.com</u>

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## 4. Typical Frequency Response



## 5. Performance

5-1. Maximum Ratings

Rating	Value	Unit	
RF Power Dissipation	Р	0	dBm
DC Voltage	V <sub>DC</sub>	10	V
Operable Temperature Range	T <sub>A</sub>	-10 to +65	°C
Storage Temperature Range	$T_{\rm stg}$	-40 to +85	°C

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5-2.	Electronic	Characteristics
J-Z.		Unaracteristics

Characteristic		Minimum	Typical	Maximum	Unit
Centre Frequency	f <sub>C</sub>		458.000		MHz
User Signal Band	BW		±1.0		MHz
Insertion Loss f <sub>C</sub> ± 1.0 MHz	IL		3.5	4.8	dB
$\begin{array}{rrrr} \mbox{Absolute Attenuation} & f_C \ -100.0 \ \mbox{MHz} & \mbox{to} \ \ f_C \ -10.0 \ \mbox{MHz} & \mbox{to} \ \ f_C \ +23.0 \ \mbox{MHz} & \mbox{to} \ \ f_C \ +23.0 \ \mbox{MHz} & \mbox{to} \ \ f_C \ +100.0 \ \mbox{MHz} & \mbox{to} \ \ \ f_C \ +100.0 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	α	38 22 40	50 30 52		dB dB dB
Pass Band Ripple f <sub>C</sub> ± 1.0 MHz	Δα			2.0	dB
Input / Output Impedance (Nominal) 50Ω /			50Ω // 0p	ρF	

## **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 Ω test system with VSWR ≤1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter centre frequency, f<sub>C</sub>. 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.

7.

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