

## SAW BANDPASS FILTER

**ACT PART NO.: ACTF8058/868.6W/DCC6**

<b>Product Type:</b>		<b>Customer:</b>
SAW Filter		
<b>Part NO.:</b>	ACTF8058/868.6W/DCC6	<b>Customer Part NO.:</b>
		<b>Issued Date:</b>

<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>

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

**ISO9001 Registered**

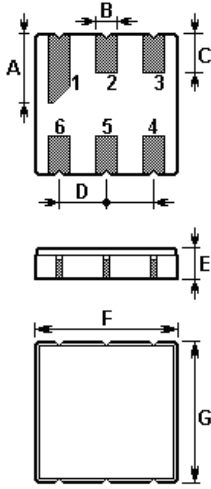
For quotations or further information please contact us at:

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

<http://www.actcrystals.com>

The **ACTF8058** is a low-loss, compact, and economical surface-acoustic-wave (**SAW**) RF filter in a surface-mount ceramic **DCC6** case with center frequency **868.60** MHz.

### 1. Package Dimensions (DCC6)



Pin	Connection
2	Input
5	Output
1, 3, 4, 6	Ground

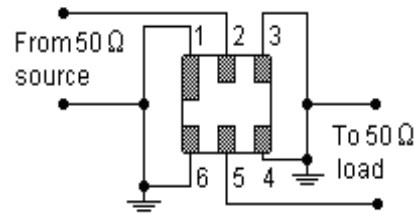
Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	1.90±0.1	E	1.35±0.15
B	0.64±0.1 (x6)	F	3.80±0.15
C	1.00±0.1 (x5)	G	3.80±0.15
D	1.27±0.1 (x4)		

### 2. Marking

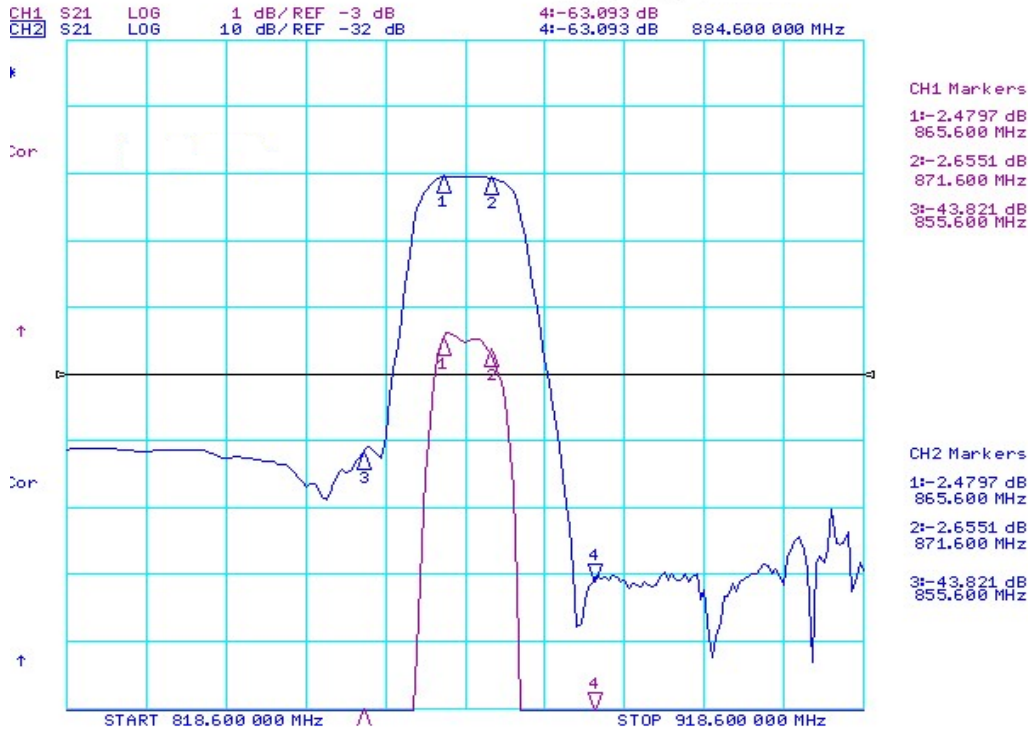


Laser Marking

### 3. Test Circuit



### 4. Typical Frequency Response:



## 5. Performance

### 5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	$P$	10	dBm
DC Voltage	$V_{DC}$	12	V
Operable Temperature Range	$T_A$	-40 to +85	°C
Storage Temperature Range	$T_{stg}$	-40 to +85	°C

### 5-2. Electronic Characteristics

Characteristic		Min.	Typ.	Max.	Unit
Center Frequency	$f_c$		868.600		MHz
Insertion Loss	$IL$	--	2.4	4.0	dB
	865.6 MHz .... 871.6 MHz				
3dB Bandwidth	$BW_3$	10	11.5		MHz
Passband Ripple	$\Delta\alpha$	--	0.5	1.0	dB
	865.6 MHz .... 871.6 MHz				
Relative Attenuation (relative to $IL$ )	$\alpha_{rel}$				
	100.00 MHz .... 856.00 MHz	35	42	--	dB
	885.00 MHz .... 905.00 MHz	35	58	--	dB
	905.00 MHz .... 1500.00 MHz	40	55	--	dB
Input / Output Impedance		50			$\Omega$

**ⓘ 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, all measurements are made with the filter installed in the specified test fixture that is connected to a 50 $\Omega$  test system with  $V_{SWR} \leq 1.2:1$ . 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.