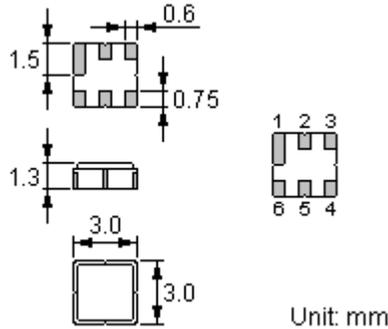


**Part Number: ACTF8062-868.30MHz-DCC6C-JF868**

**Frequency: 868.300MHz**

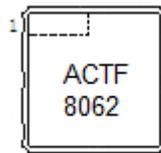
The **ACTF8062-868.30MHz-DCC6C-JF868** is a low-loss, compact, and economical surface-acoustic-wave (SAW) filter in a surface-mount ceramic **DCC6C** case with center frequency **868.300 MHz**.

**1. Package Dimension (DCC6C)**



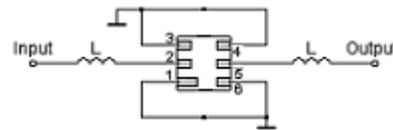
Pin	Configuration
2	Input
5	Output
1, 3, 4, 6	Case Ground

**2. Marking**



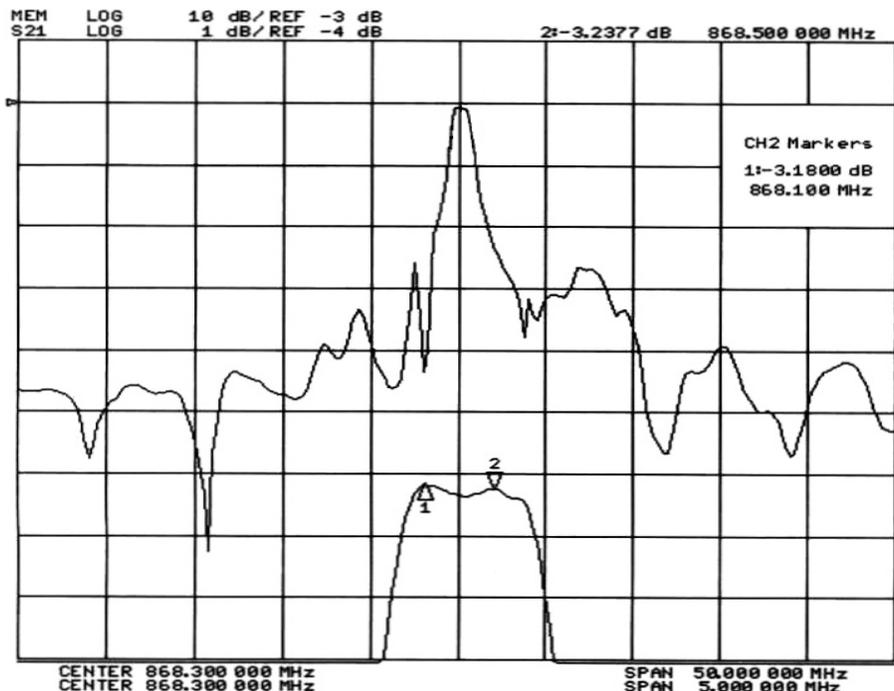
Laser Printing, Top View

**3. Test Circuit**



L = 8.2 Nh

**4. Typical Frequency Response**



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

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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>

## 5. Performance

### 5-1. Maximum Ratings

Rating		Value	Unit
Input Power Level	$P_{in}$	+15	dBm
DC Voltage	$V_{DC}$	12	V
Storage Temperature Range	$T_{stg}$	-40 to +125	°C
Operable Temperature Range	$T_A$	-40 to +125	°C

### 5-2. Electronic Characteristics

Characteristic		Minimum	Typical	Maximum	Unit
Center Frequency (center frequency between 3dB points)	$f_c$		868.300		MHz
Insertion Loss	$IL$	--	3.5	4.5	dB
3dB Pass band	$BW_3$	800	950	1050	kHz
Rejection	at $f_c$ -21.4 MHz (Image)	40	45	--	dB
	at $f_c$ -10.7 MHz (LO)	30	40	--	
	Ultimate	--	50	--	
Temperature	Turnover Temperature	$T_O$	10	55	°C
	Turnover Frequency	$f_O$	$f_c$		MHz
	Frequency Temperature Coefficient	$FTC$		0.032	ppm/°C <sup>2</sup>
Frequency Aging	Absolute Value during the First Year	$ f_A $	10		ppm/yr

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

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#### NOTE:

- The frequency  $f_c$  is defined as the midpoint between the 3dB frequencies.
- 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 is 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.
- Unless noted otherwise, specifications apply over the entire specified operating temperature range.
- Frequency aging is the change in  $f_c$  with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
- Turnover temperature,  $T_O$ , is the temperature of maximum (or turnover) frequency,  $f_O$ . The nominal frequency at any case temperature,  $T_C$ , may be calculated from:  $f = f_O [1 - FTC (T_O - T_C)^2]$ .
- The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
- All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
- 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.

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