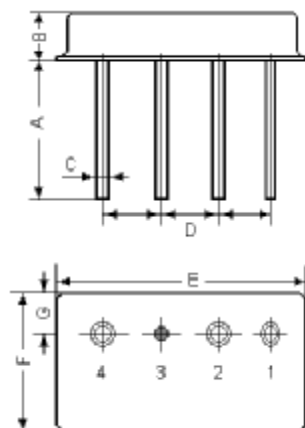


The **ACTR2/3N/55.24/61.24/SF712** is a true one-port surface-acoustic-wave (**SAW**) resonator in a low-profile **SF712** case intended for the US channel RF modulator. ( NTSC2/3 )

## 1.Package Dimension (SF712)

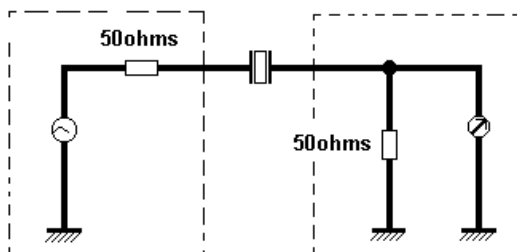


## 2.

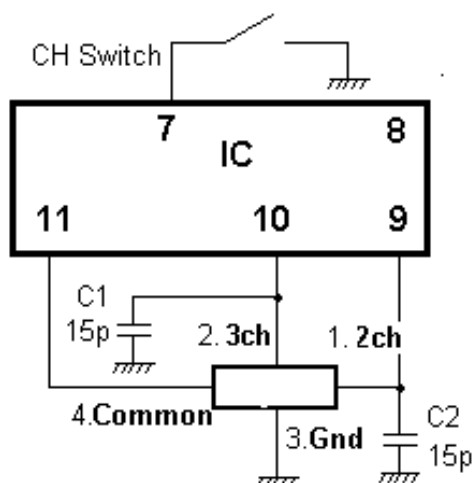
Pins	Configuration
1	2CH
2	3CH
3	Case Ground
4	Common

Sign	Data (unit: mm)	Sign	Data (unit: mm)
A	5.0/8.0	E	12.0
B	3.5	F	7.2
C	0.5	G	2.0
D	2.54		

## 3 Measuring Circuit for Resonant Loss



## 4. Typical Application Circuit



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

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Issue : 1 C1

Date : SEPT 04

## 5. Performance

### 5-1. Electrical Characteristics

Reference temperature shall be  $25 \pm 2^{\circ}\text{C}$

Item		Specification	Remarks
Resonant Frequency	2ch	$55.24 \pm 0.08 \text{ MHz}$	Measured by HP8711A
	3ch	$61.24 \pm 0.08 \text{ MHz}$	
Resonator Loss	2ch	3.8 dB Typical 5.0 dB Max	Measured by LCR Meter HP4275A
	3ch		
Parallel Capacitance	2ch	$4.5 \pm 1.0 \text{ pF}$	Measured by LCR Meter HP4275A
	3ch		
Temp Coef. for Frequency		$\pm 8 \text{ ppm}/^{\circ}\text{C}$ Max	$-10^{\circ}\text{C}$ to $+60^{\circ}\text{C}$

### 5-2. Maximum Rating

Item	Terminals to Measure	Maximum rating	Remarks
DC Voltage	2ch – Common 3ch – Common	10V 10V	
Pulse Impressing	Between each terminal	10V	1/60 sec. Max
AC Voltage	Between each terminal	10Vp-p	Commercial Frequency
Operation Temp.		$-10^{\circ}\text{C}$ to $+60^{\circ}\text{C}$	
Storage Temp.		$-40^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	
Level	2ch- common 3ch- common	0.2mW ( $P_{osc} = I^2 R_e$ )	I: Oscillation Current Re: Oscillation Imp

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Issue : 1 C1

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#### 5 - 3 Solderability

Solderability	Dipping terminals into Methanol (JIS-K-501) of rosin(JIS-K-5902) Then, into molten solder at $230\pm5^{\circ}\text{C}$ for $3\pm0.5^{\circ}\text{C}$ seconds	More than 95% of the terminal surface should be covered in smooth solder
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#### **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!**

1. The centre frequency,  $f_c$ , is measured at the minimum IL point with the resonator in the  $50\ \Omega$  test system.
2. Unless noted otherwise, case temperature  $T_C = +25^{\circ}\text{C}\pm2^{\circ}\text{C}$ .
3. Frequency aging is the change in  $f_c$  with time and is specified at  $+65^{\circ}\text{C}$  or less. Aging may exceed the specification for prolonged temperatures above  $+65^{\circ}\text{C}$ . Typically, aging is greatest the first year after manufacture, decreasing in subsequent years.
4. Derived mathematically from one or more of the following directly measured parameters:  $f_c$ , IL, 3 dB bandwidth,  $f_c$  versus  $T_C$ , and  $C_0$ .
5. The specifications of this device are subject to change or obsolescence without notice.
6. Typically, equipment utilizing this device requires emissions testing and government approval, which is the responsibility of the equipment manufacturer.
7. 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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