

- **Ideal for Wireless Audio Applications in 869.00 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Rugged, Hermetic, Low Profile F-11 Package**
- **Complies with Directive 2002/95/EC (RoHS Compliant)**

# SF869C

ABSOLUTE MAXIMUM RATING ( $T_A=25^{\circ}\text{C}$ )		
Parameter	Rating	Unit
CW RF Power Dissipation $P$	0	dBm
DC Voltage VDC Between Any Two Pins $V_{DC}$	$\pm 10$	V
Operating Temperature Range $T_A$	-10 ~ +60	$^{\circ}\text{C}$
Storage Temperature Range $T_{stg}$	-40 ~ +85	$^{\circ}\text{C}$

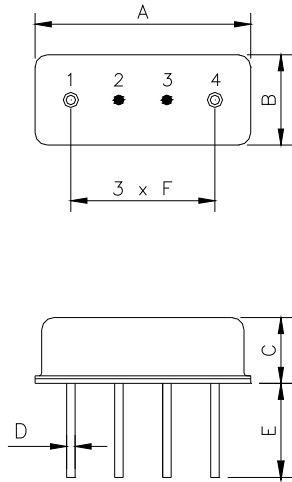
ELECTRONIC CHARACTERISTICS					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25 $^{\circ}\text{C}$ ) (Center frequency between 3dB point)	$f_c$	NS	869.00	NS	MHz
Insertion Loss 868.00 ... 870.00 MHz	$IL$	-	4.5	-	dB
Amplitude Ripple (p-p) 868.00 ... 870.00 MHz	$\Delta\alpha$	-	1.5	-	dB
Absolute Attenuation					
825.00 ... 828.00 MHz	$\alpha_{rel}$	40	-	-	dB
845.00 ... 849.00 MHz		35	-	-	dB
889.00 ... 892.00 MHz		35	-	-	dB
910.00 ... 913.00 MHz		40	-	-	dB
Frequency Aging Absolute Value during the First Year	$ f_A $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	$M\Omega$
Input / Output Impedance (nominal)	-	-	50	-	$\Omega$

NS = Not Specified

**Notes:**

- 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 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 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.
- 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.
- For questions on technology, prices and delivery please contact our sales offices or email to sales@vanlong.com.

PACKAGE DIMENSIONS (F-11)



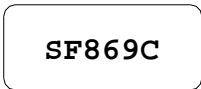
Electrical Connections

Terminals	Connection
1	Input/Output
2	Case Ground
3	Case Ground
4	Output/Input

Package Dimensions

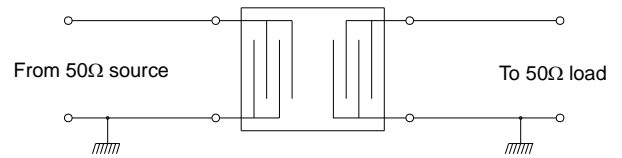
Dimensions	Nom. (mm)	Tol. (mm)
A	11.0	±0.3
B	4.5	±0.3
C	3.2	±0.3
D	0.45	±0.1
E	5.0	±0.5
F	2.54	±0.2

MARKING



Ink Marking  
Color: Black or Blue

TEST CIRCUIT



TYPICAL FREQUENCY RESPONSE

