

- **Ideal for Receiver in 821.50 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Rugged, Hermetic, Low Profile F-11 Package**

SF821

Absolute Maximum Rating (Ta=25°C)		
Parameter	Rating	Unit
CW RF Power Dissipation	P	+10
DC Voltage VDC Between Any Two Pins	V_{DC}	±30
Operating Temperature Range	T_A	-10 ~ +60
Storage Temperature Range	T_{stg}	-40 ~ +85

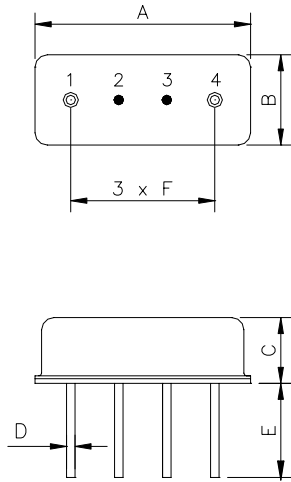
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	821.50	NS	MHz
Insertion Loss 820.50 ... 822.50 MHz	IL	-	4.0	5.5	dB
3dB Bandwidth	BW_3	-	±8.0	-	MHz
Usable Bandwidth	BW	-	±1.0	-	MHz
Amplitude Ripple (p-p) 820.50 ... 822.50 MHz	$\Delta\alpha$	-	1.0	1.5	dB
Attenuation					
DC ... 791.50 MHz	α_{rel}	45	55	-	dB
820.50 ... 822.50 MHz		-	4.0	5.5	dB
851.50 ... 1021.5 MHz		40	40	-	dB
Frequency Aging Absolute Value during the First Year	$ fA $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	MΩ
Input / Output Impedance (nominal)	-	-	50	-	Ω

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 50Ω test system with VSWR ≤ 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)



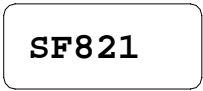
Electrical Connections

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

Package Dimensions

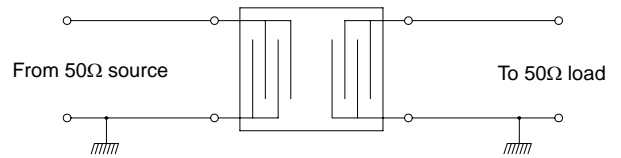
Dimensions	Nom. (mm)	Tol. (mm)
A	11.0	±0.3
B	4.5	±0.3
C	3.2	±0.3
D	0.45	±0.1
E	5.0	±0.5
F	2.54	±0.2

Marking



Ink Marking
Color: Black or Blue

Test Circuit



Typical Frequency Response

