

- **Ideal for Receiver in 446.00 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)**

SF446A

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

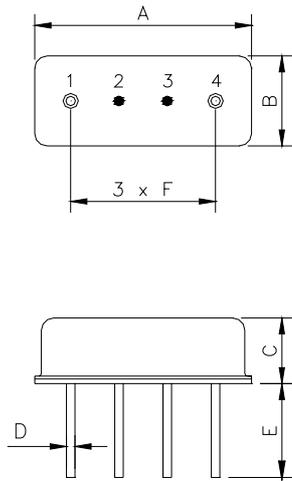
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	446.00	NS	MHz
Insertion Loss 443.00 ... 449.00 MHz	IL	-	3.5	5.0	dB
User Signal Passband	BW	-	± 3.0	-	MHz
Passband Ripple (p-p) 443.00 ... 449.00 MHz	$\Delta\alpha$	-	2.0	-	dB
Attenuation (out of $f_c \pm 30$ MHz)	α_{rel}	50	60	-	dB
Frequency Aging Absolute Value during the First Year	$ fA $	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins	-	1.0	-	-	M Ω
Input / Output Impedance (nominal)	-	-	50//0	-	Ω //pF

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 Ω 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

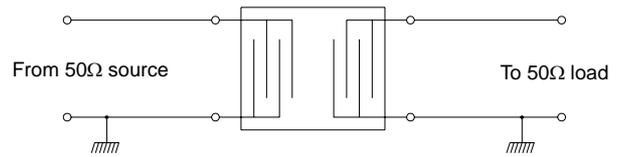
Dimensions	Nom. (mm)	Tol. (mm)
A	11.0	±0.3
B	4.5	±0.3
C	3.2	±0.3
D	0.45	±0.1
E	5.0	±0.5
F	2.54	±0.2

Marking



Ink Marking
Color: Black or Blue

Test Circuit



Typical Frequency Response

