

- Designed to Provide Front-end selectivity in 868.35 MHz
- Low-Loss, Coupled-Resonator Quartz Design
- Simple External Impedance Matching
- Rugged, Hermetic, Low Profile F-11 Package

SF868M35B

Absolute Maximum Rating (Ta=25°C)						
Parameter		Rating	Unit			
CW RF Power Dissipation	Р	+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	868.35	NS	MHz	
Insertion Loss		IL	-	3.5	5.5	dB	
3dB Passband		BW ₃	-	1.2	=	MHz	
Passband Ripple		Δα	-	-	±1.0	dB	
Rejection	at f _C - 21.4 MHz (Image)	-	35	45	-	dB	
	at f _C - 10.7 MHz (LO)	-	25	35	-	dB	
	Ultimate	-	-	60	-	dB	
Temperature Stability	Operating Temperature Range	T_{C}	-10	-	+60	°C	
	Turnover Temperature	To	25	-	55	°C	
	Turnover Frequency	f _O	-	f _C	-	MHz	
	Frequency Temperature Coefficient	FTC	=	0.032	-	ppm/C ²	
Frequency Aging Absolute Value during the First Year		fA	-	-	10	ppm/yr	
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	MΩ	

NS = Not Specified

Notes:

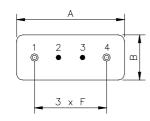
- The frequency f_C is defined as the midpoint between the 3dB frequencies.
- 2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR ≤ 1.2:1. The test fixture L and C are adjusted for minimum insertion 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.
- 4. 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.

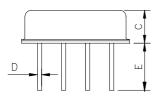
- Turnover temperature, T₀, is the temperature of maximum (or turnover) frequency, f₀. The nominal frequency at any case temperature, T_C, may be calculated from: f = f₀ [1 - FTC (T₀ - T_C)²].
- The specifications of this device are based on the test circuit shown above and subject to change or obsolescence 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.
- For questions on technology, prices and delivery please contact our sales offices or email to sales@vanlong.com.

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Package Dimensions (F-11)





Electrical Connections

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

Package Dimensions

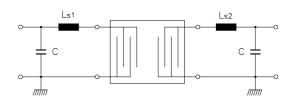
Dimensions	Nom. (mm)	Tol. (mm)
Α	11.0	±0.3
В	4.5	±0.3
С	3.2	±0.3
D	0.45	±0.1
E	5.0	±0.5
F	2.54	±0.2

Marking

SF868M35B

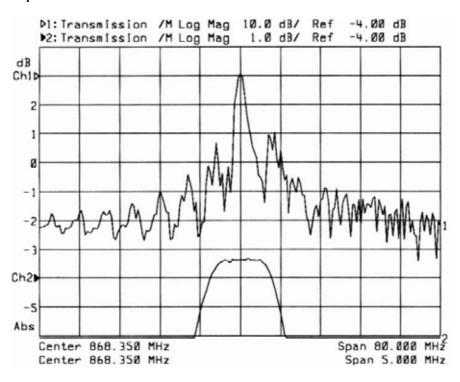
Ink Marking
Color: Black or Blue

Test Circuit



 $C = 4 \sim 8 \text{ pF}^*$ Ls1 = Ls2 = 2 tunes of 0.5mm insulated copper, 3.0mm ID

Typical Frequency Response



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