- ***Designed to Provide Front-end selectivity in 433.92 MHz***
- ***Low-Loss, Coupled-Resonator Quartz Design***
- ***Simple External Impedance Matching***
- ***Rugged, Hermetic, Low Profile TO-39 Package***

SF433E

Absolute Maximum Rating (Ta=25°C)			
Parameter		Rating	Unit
CW RF Power Dissipation	P	+10	dBm
DC Voltage V_{DC} Between Any Two Pins	V_{DC}	0	V
Operating Temperature Range	T_A	-40 ~ +85	°C
Storage Temperature Range	T_{stg}	-45 ~ +125	°C

Electronic Characteristics						
Parameter		Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)		f_C	NS	433.92	NS	MHz
Insertion Loss	433.80 … 434.12 MHz	*IL*	-	2.0	4.0	dB
3dB Passband		BW_3	670	730	790	KHz
Passband (relative to *IL*)						
	433.76 … 434.08 MHz	α	-	1.0	2.0	dB
	433.74 … 434.10 MHz		-	1.0	3.0	dB
	433.68 … 434.16 MHz		-	1.5	6.0	dB
Relative Attenuation (relative to *IL*)						
	10.00 … 414.00 MHz	α_{rel}	45	50	-	dB
	414.00 … 428.00 MHz		35	40	-	dB
	428.00 … 432.84 MHz		15	20	-	dB
	434.92 … 442.00 MHz		10	15	-	dB
	442.00 … 550.00 MHz		35	40	-	dB
	550.00 … 1000.00 MHz		45	50	-	dB
Temperature coefficient of frequency		*FTC*	-	0.032	-	ppm/K
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:

1. 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.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. 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.
7. For questions on technology, prices and delivery please contact our sales offices or email to sales@vanlong.com.

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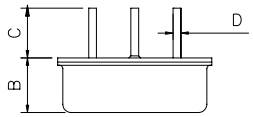
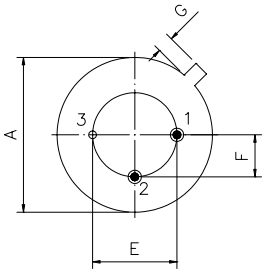
Package Dimensions (TO-39)





Electrical Connections

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

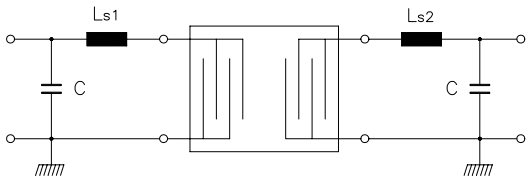
Package Dimensions

Dimensions	Nom. (mm)	Tol. (mm)
A	9.35	±0.10
B	3.40	±0.10
C	3.00	±0.20
D	0.45	±0.10
E	5.08	±0.10
F	2.54	±0.20
G	0.45	

Marking

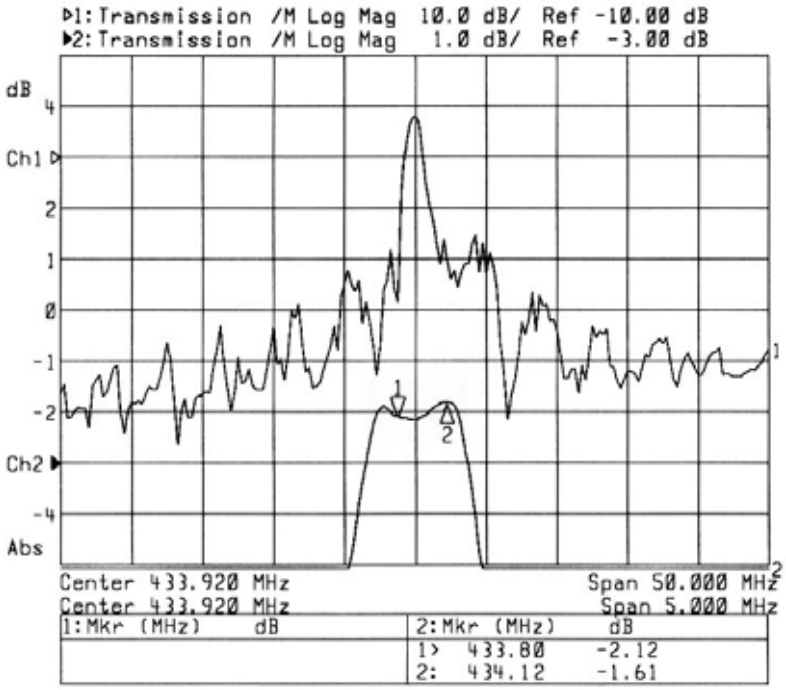
Ink Marking
Color: Black or Blue

Test Circuit



C = 5.6 pF
Ls1 = Ls2 = 33 nH

Typical Frequency Response



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