

- **Designed to Provide Front-end selectivity in 480.00 MHz**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Rugged, Hermetic, Low Profile TO-39 Package**

SF480

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}	-45 ~ +125	°C

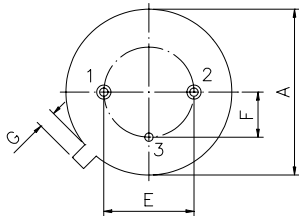
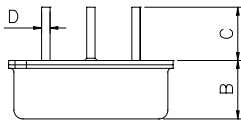
Electronic Characteristics					
Parameter	Sym	Minimum	Typical	Maximum	Unit
Nominal Frequency (at 25°C) (Center frequency between 3dB point)	f_c	NS	480.00	NS	MHz
Insertion Loss 478.00 ... 482.00 MHz	IL	-	2.5	4.0	dB
3dB Passband	BW_3	-	22.0	-	MHz
Usable Bandwidth	BW	-	±2.0	-	MHz
Relative Attenuation (relative to IL)					
DC ... $f_c - 50.00$ MHz	α_{rel}	36.0	48.0	-	dB
$f_c - 50.00$... $f_c - 25.00$ MHz		30.0	40.0	-	dB
$f_c + 60.00$... $f_c - 200.00$ MHz		42.0	56.0	-	dB
Passband Ripple	$\Delta\alpha$	-	-	2.0	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:

- 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 (TO-39)



Electrical Connections

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

Package Dimensions

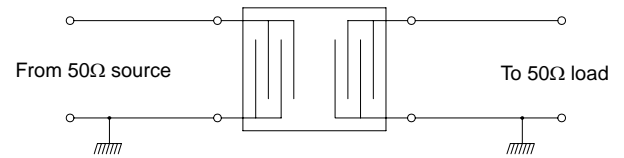
Dimensions	Nom. (mm)	Tol. (mm)
A	9.35	±0.10
B	3.40	±0.10
C	3.00	±0.20
D	0.45	±0.10
E	5.08	±0.10
F	2.54	±0.20
G	1.0	

Marking



Ink Marking
Color: Black or Blue

Test Circuit



Typical Frequency Response

