- ***Ideal Front-End Filter for Wireless Receivers***
- ***Low-Loss, Coupled-Resonator Quartz Design***
- ***Simple External Impedance Matching***
- ***Rugged, Hermetic, Low Profile TO-39 Package***
- ***Complies with Directive 2002/95/EC (RoHS Compliant)***

SF480-L3R

Absolute Maximum Rating (Ta=25°C)		
Parameter	Rating	Unit
CW RF Power Dissipation	+10	dBm
DC Voltage V_{DC} Between Any Two Pins	±30	VDC
Operating Temperature Range	-20 ~ +70	°C
Case Temperature Range	-45 ~ +85	°C
Soldering Temperature	235	°C

Electronic Characteristics						
Parameter		Sym	Minimum	Typical	Maximum	Unit
Nominal Center Frequency		*fc*	NS	480.00	NS	MHz
3dB Passband		*BW3*	-	22	-	MHz
Usable Bandwidth		*BW*	-	4	-	MHz
Insertion Loss	478.00MHz 482.00MHz	*IL*	-	2.5	4.0	dB
Absolute Rejection						
	DC .... *fc* - 50.00MHz	α	36	48	-	dB
	fc - 50.00MHz .... *fc* - 25.00MHz		30	40	-	dB
	fc + 60.00MHz .... *fc* + 200.0MHz		42	56	-	dB
Passband Ripple	478.00MHz 482.00MHz	$\Delta\alpha$	-	-	2.0	dB
Frequency Aging	Absolute Value during the First Year	$\lvert f_A \rvert$	-	-	10	ppm/yr
DC Insulation Resistance Between any Two Pins		-	1.0	-	-	MΩ
Input / Output Impendance		-	-	50	-	Ω

NS = Not Specified

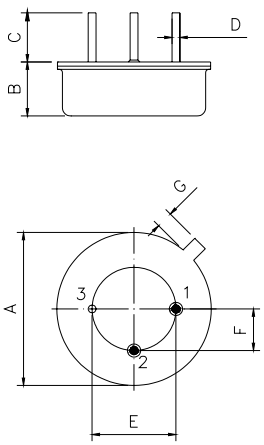
Notes:

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. 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.
5. Turnover temperature, T_0, is the temperature of maximum (or turnover) frequency, f_0. The nominal frequency at any case temperature, T_C, may be calculated from: $f = f_0 [1 - FTC (T_0 - T_C)^2]$.
6. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
7. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
8. 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.
9. For questions on technology, prices and delivery please contact our sales offices or email to sales@vanlong.com.

Phone: +86 (10) 5820-3910 Fax: +86 (10) 5820-3915 Email: sales@vanlong.com Web: http://www.vanlong.com

© 2007 by Vanlong Technology Co., Ltd.

Package Dimensions (TO-39)



Electrical Connections

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

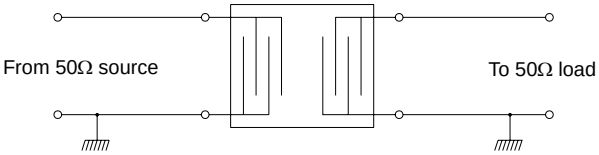
Package Dimensions

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	

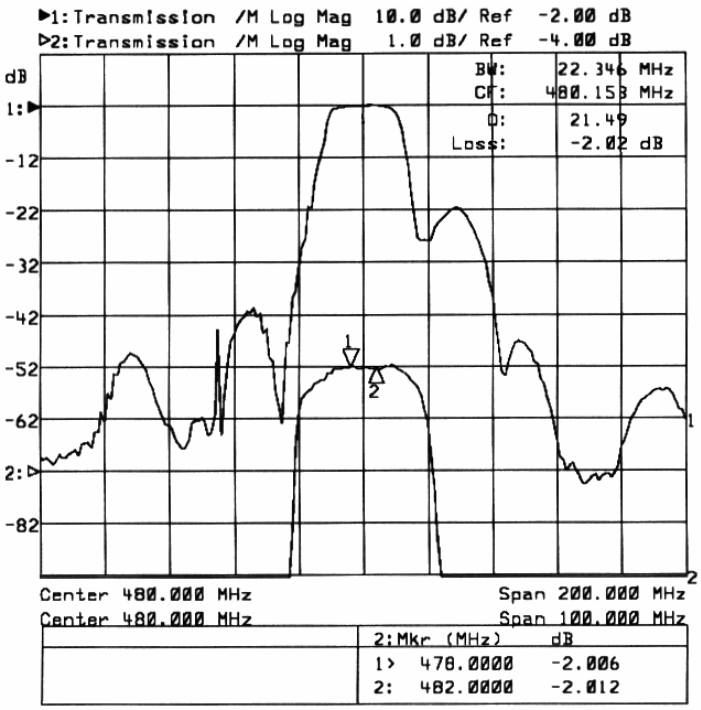
Marking

Ink Marking
Color: Black or Blue

Test Circuit



Typical Frequency Response



© 2007 by Vanlong Technology Co., Ltd.