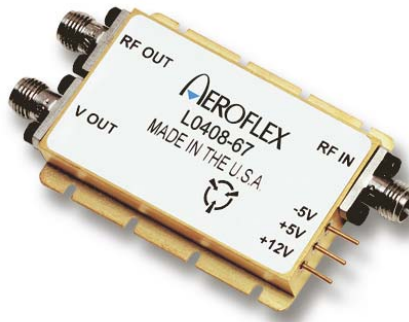


# L0408-67 Logarithmic Amplifier 4.0 To 8.0GHz

## ADVANCED DATA SHEET

www.aeroflex.com/bband



**AEROFLEX**  
A passion for performance.

### DESCRIPTION

The Aeroflex Plainview cutting edge Logarithmic Amplifier designs are enabling new applications. Our team of engineers can custom design Log Amplifiers using latest CAD Simulation software to meet even the most demanding specifications.

### FEATURES

- Ultra Wideband with High Sensitivity
- Great Dynamic Range
- Fast Rise Times
- Custom Configurations in Small Package
- Packaging - Hermetic / Non-Hermetic

### SPECIFICATIONS

#### Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNITS
Operating Temperature - Case	$T_{MO}$	-20	+85	°C
Storage Temperature - Case	$T_{MS}$	-40	+95	°C
Negative Supply Voltage	$V_{-SS}$	-9	-	V
Positive Supply Voltage	$V_{+SS}$	-	+15	V

#### Nominal Operating Conditions

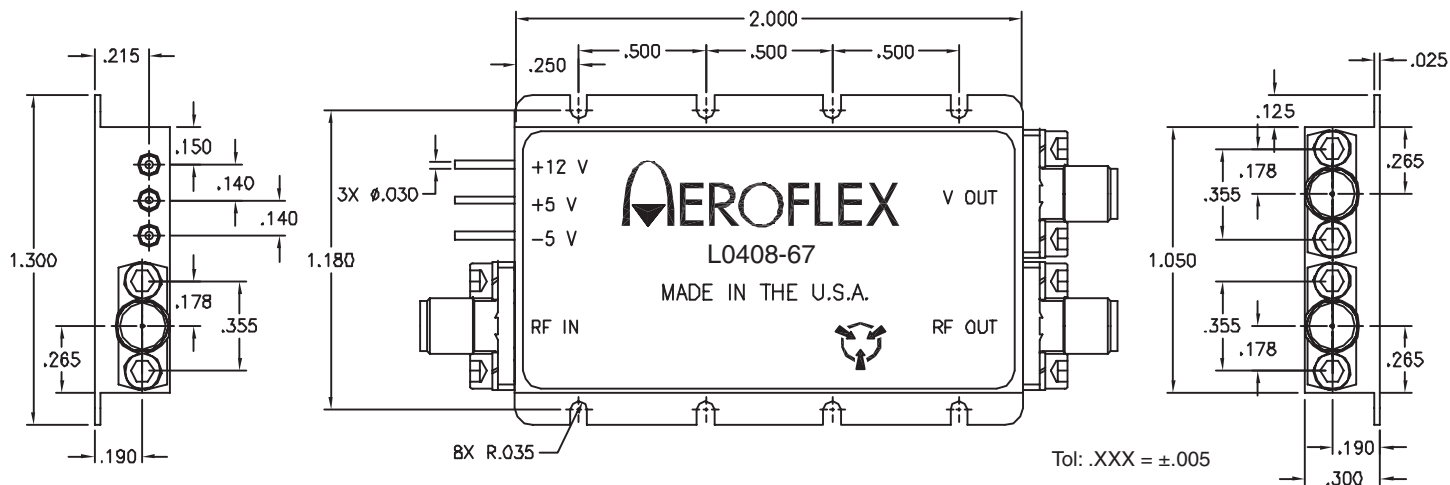
PARAMETER	CONDITIONS	MIN	MAX	UNITS
Temperature, $T_O$	Full Range	-10	+75	°C
Positive Supply Voltage, $V_{PS}$		+7.7	+12	V
Negative Supply Voltage, $V_{NS}$		-5.25	-4.75	V

#### Electrical Characteristics

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Frequency Range		4.0	-	8.0	GHz
Dynamic Range		-67	-	0	dBm
Tangential Signal Sensitivity (TSS)		-70	-	-	dBm
Linearity	Over Frequency @ 25°C	-	-	±1.0	dB
	Over Frequency and Temperature	-	-	±2.0	dB
Log Slope	93 ohms	14	15	16	mV/dB
Video Output Voltage	Across 93 Ohms	0	-	1.5	V
Pulse Rise Time	10-90%	-	-	10	ns
Pulse Fall Time	10-90%	-	-	25	ns
RF Input Impedance	Reference to 50 Ohms	-	-	2.0:1	-
RF Output Impedance	Reference to 50 Ohms	-	-	2.0:1	-
Recovery Time		-	35	-	ns
Limited RF Output Power		-	6	-	dBm
Limited RF Output VSWR	Reference to 50 Ohms	-	-	2.0:1	-
Supply Current	+8V	-	500	-	mA
	-5V	-	-100	-	mA

Aeroflex Plainview

## OUTLINE DRAWING



## ORDERING INFORMATION

MODEL NUMBER	HERMETICITY	PACKAGE
L0408-67H	Hermetic	2.0L x 1.180W x .300Ht
L0408-67	Non Hermetic	

**PLAINVIEW, NEW YORK**  
Toll Free: 800-THE-1553  
Fax: 516-694-6715

**INTERNATIONAL**  
Tel: 805-778-9229  
Fax: 805-778-1980

**NORTHEAST**  
Tel: 603-888-3975  
Fax: 603-888-4585

**SE AND MID-ATLANTIC**  
Tel: 321-951-4164  
Fax: 321-951-4254

**WEST COAST**  
Tel: 949-362-2260  
Fax: 949-362-2266

**CENTRAL**  
Tel: 719-594-8017  
Fax: 719-594-8468

[www.aeroflex.com](http://www.aeroflex.com)    [info-ams@aeroflex.com](mailto:info-ams@aeroflex.com)

Aeroflex Microelectronic Solutions reserves the right to change at any time without notice the specifications, design, function, or form of its products described herein. All parameters must be validated for each customer's application by engineering. No liability is assumed as a result of use of this product. No patent licenses are implied.



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused