

## 6706,7,8 SERIES 6806 SERIES

### FEATURES

- Type SMA Connectors Standard
- Options from DC to 8 GHz
- High Performance, Trough line Style Structure
- MIL Grade Materials and Processing
- -40 to + 125°C Operating Temperature Range

### SPECIFICATIONS

Model	6706	6806	6707	6708
Frequency Range (GHz)	DC-2	DC-2	DC-4	DC-8
Phase Shift, min (°/GHz)	290	290	145	72
Phase Shift, min (°/GHz/Shaft Turn)	9.7	9.7	4.9	2.4
Insertion Phase Nom @ Min Phase Setting (°/GHz)	540	550	290	170
Number of Turns, min	30	30	30	30
VSWR max	1.35	1.35	1.60	1.60
Insertion Loss, max (dB)	0.7	0.7	0.7	0.7
Power				
Average (Watts)	100	100	100	100
Peak (Watts)	1000	1000	1000	1000
Time Delay, nom @ Min Phase Setting (nsec)	1.5	1.5	0.8	0.45
Weight				
Ounces	8.3	9.3	4.8	3.1
Grams	235	263	136	88

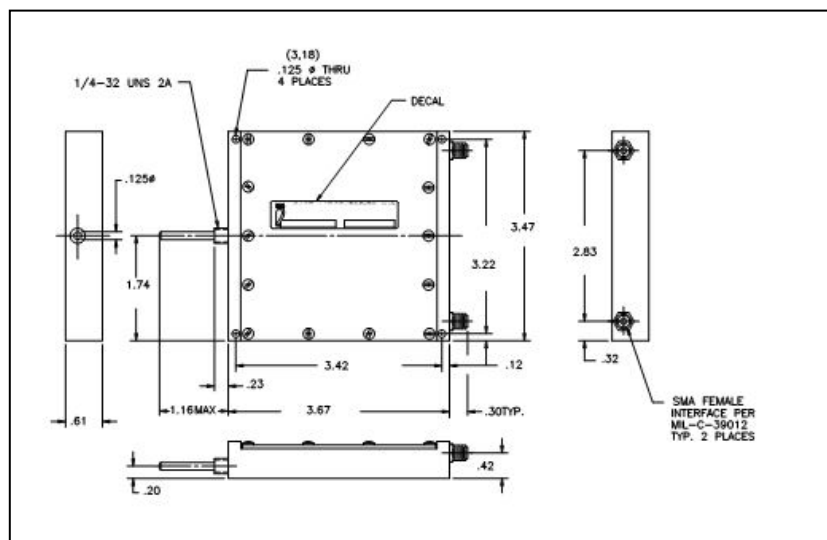
### NOTES:

1. 1 Degree per GHz of Phase Shift equals 2.78 picoseconds of time delay.
2. Average and Peak Power are given at ambient temperature and altitude with Type SMA Connectors. Power is further limited by the power threshold level of selected connector style.

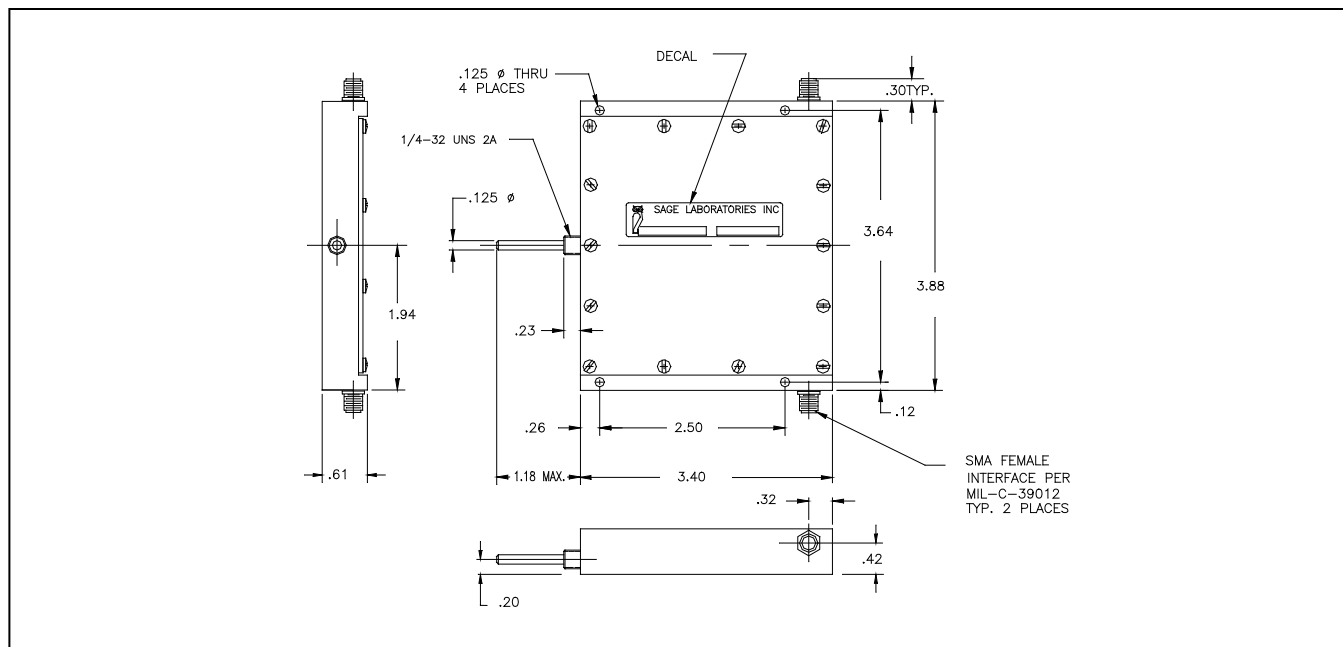


OUTLINE DRAWINGS

MODELS 6706



MODELS 6806



[illegible]

1/4-32 UNS-2A

.13  $\phi$

.125  $\phi$  THRU 4 PLACES

DECAL

SAGE LABORATORIES INC.

39012

1.06

.81

.12

.30 TYP.

3.42

.23 MAX. (.58)

3.67

.16 MAX.

.53

.61

.41

.33

SMA FEMALE INTERFACE PER MIL-C-39012 TYP. 2 PLACES

.42

3.42

.20

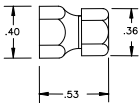
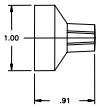



## ORDERING INFORMATION

### DRIVE SHAFT AND CONNECTOR OPTIONS:

1. Only the following standard control options are available. The base model is available without additional options.
2. Add suffix as designated below to the ordering model number.

MODEL # PLUS	DESCRIPTION
-1	Shaft Lock
-2	Turns Counter With Built In Shaft Lock
-4	Screw Driver Slot
-5	Control Knob
-14	Shaft Lock With Screw Driver Slot
-15	Shaft Lock With Control Knob

(-1) SHAFT LOCK	(-2) TURNS COUNTER W/ SHAFT LOCK	(-5) CONTROL KNOB
		 <p>D= 0.5" L=0.65</p>

### MISCELLANEOUS:

1. API Technologies "Standard Warranty and Order Terms and Conditions" apply to all orders.
2. All specifications subject to change without notice.
3. Check "Ordering and Availability Listing" for delivery and ordering information.
4. Contact our local Manufacturers Representative for pricing.

Specification Revision - 010813

