

6706,7,8 SERIES 6806,8 SERIES

#### **FEATURES**

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

# **SPECIFICATIONS**

| Model   | 6706 | 6806 | 6707 | 6708 | 6808 |
|---|------|------|------|------|------|
| Frequency Range (GHz)                           | DC-2 | DC-2 | DC-4 | DC-8 | DC-8 |
| Phase Shift, min (°/GHz)                        | 290  | 290  | 145  | 72   | 72   |
| Phase Shift, min (°/GHz/Shaft Turn)             | 9.7  | 9.7  | 4.9  | 2.4  | 2.4  |
| Insertion Phase Nom @ Min Phase Setting (°/GHz) | 540  | 550  | 290  | 170  | 180  |
| Number of Turns, min                            | 30   | 30   | 30   | 30   | 30   |
| VSWR max  | 1.35 | 1.35 | 1.60 | 1.60 | 1.60 |
| Insertion Loss, max (dB)                        | 0.7  | 0.7  | 0.7  | 0.7  | 0.7  |
| Power   |      |      |      |      |      |
| Average (Watts)                                 | 100  | 100  | 100  | 100  | 100  |
| Peak (Watts)                                    | 1000 | 1000 | 1000 | 1000 | 1000 |
| Time Delay, nom @ Min Phase Setting (nsec)      | 1.5  | 1.5  | 0.8  | 0.45 | 0.45 |
| Weight  |      |      |      |      |      |
| Ounces  | 8.3  | 9.3  | 4.8  | 3.1  | 4.3  |
| Grams   | 235  | 263  | 136  | 88   | 122  |

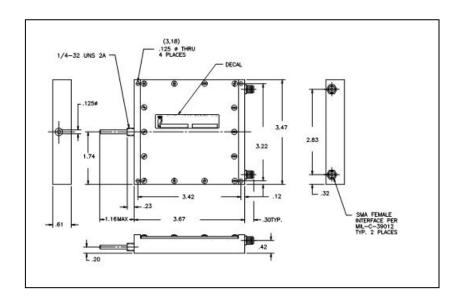
#### **NOTES:**

- 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.

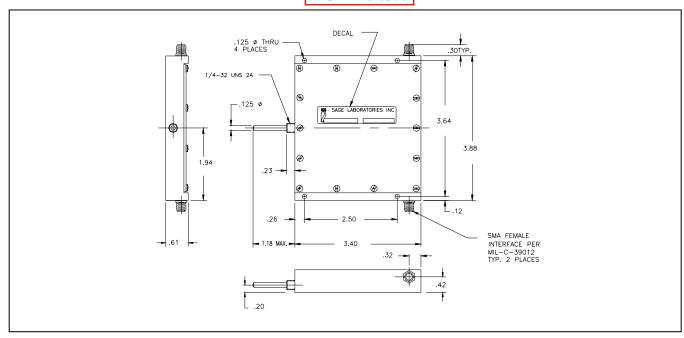


# **OUTLINE DRAWINGS**

## **MODELS 6706**

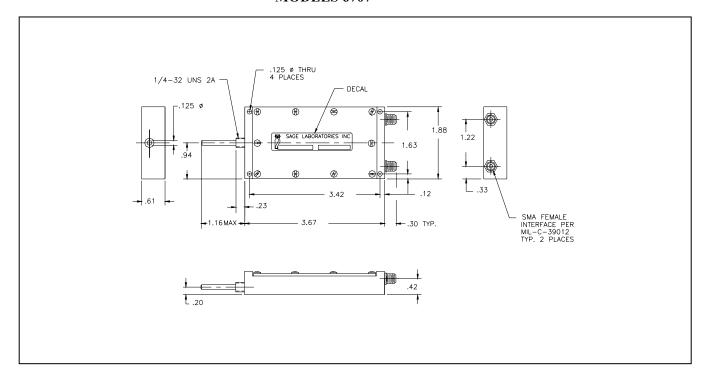


## MODELS 6806

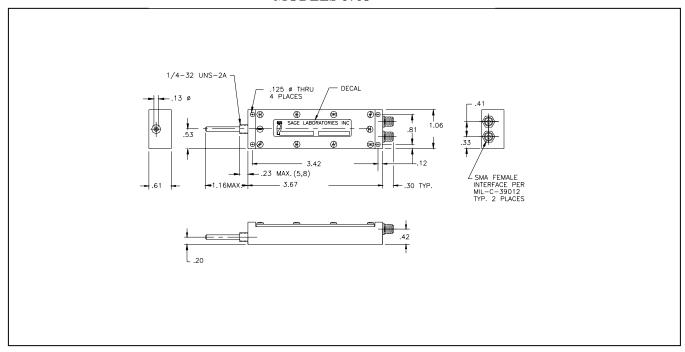




## **MODELS 6707**

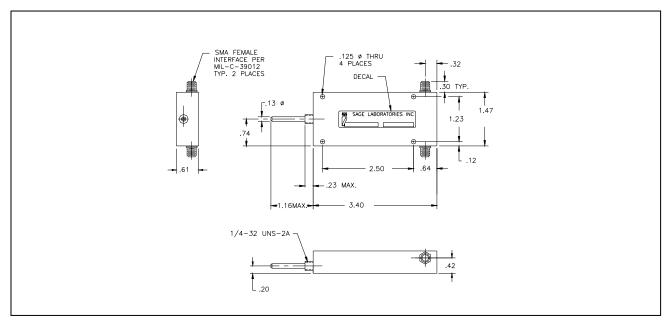


## **MODELS 6708**





#### **MODELS 6808**



# **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 |
|-----------------|---|-------------------|
| 40 356          | 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | D= 0.5" L=0.65    |

#### MISCELLANEOUS:

- 1. Spectrum Microwave "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 - 070710

