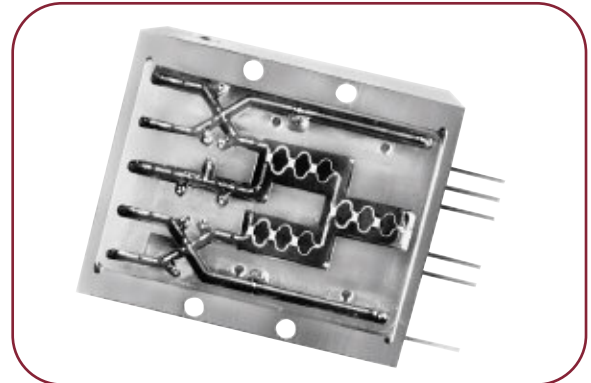


# MINIATURE CALIBRATION SWITCH

## MODEL: SWM-060180

### FEATURES

- Compact package
- Tight amplitude and phase tracking
- Fast switching
- Blind mate connectors
- Airborne military applications



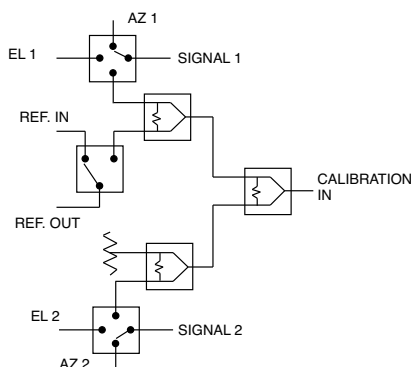
### ELECTRICAL SPECIFICATIONS

PARAMETERS	LIMITS	CONDITIONS	COMMENTS																
Frequency range	6–18 GHz																		
Insertion loss	3.3 dB maximum 10 dB maximum	AZ/EL→Sig., Ref. In→Ref. Out Cal. In→Sig., Cal. In→Ref. Out																	
Amplitude balance	±0.5 dB maximum	AZ/EL→Sig.																	
Phase balance	±5° maximum	AZ/EL→Sig.																	
Isolation	25 dB minimum 60 dB minimum	Sig.1 Out to Sig. 2 Out any unselected path	Cal. select AZ/EL select																
VSWR	2:1 maximum	Selected ports																	
Switching speed	50 ns maximum	50% TTL to 10 to 90% RF																	
DC power	5 V @ 100 mA maximum, -15 V @ 100 mA maximum		Typical																
Control	TTL, 3 lines																		
Switch positions	Transmission paths  1. AZ1→Sig. 1, AZ2→Sig. 2, Ref. In→Ref. Out 2. EL1→Sig. 1, EL2→Sig. 2, Ref. In→Ref. Out 3. Cal.→Sig. 1, Cal.→Sig. 2, Cal.→Ref. Out		<table border="1"> <thead> <tr> <th>Path</th> <th>AZ</th> <th>EL</th> <th>CAL</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>2.</td> <td>1</td> <td>0</td> <td>1</td> </tr> <tr> <td>3.</td> <td>1</td> <td>1</td> <td>0</td> </tr> </tbody> </table>	Path	AZ	EL	CAL	1.	0	1	1	2.	1	0	1	3.	1	1	0
Path	AZ	EL	CAL																
1.	0	1	1																
2.	1	0	1																
3.	1	1	0																
RF connectors	Gilbert GPO male																		

### ENVIRONMENTAL CONDITIONS

Operating temperature ..... 0 to 70°C  
 Storage temperature ..... -30 to +85°C  
 Humidity ..... 95% noncondensing  
 Vibration ..... 12 g's rms, 20-2000 Hz per MIL-STD-810B Method 514, Procedure 5

### FUNCTIONAL BLOCK DIAGRAM



#### GENERAL NOTES:

1. Dimensions shown in brackets [ ] are in millimeters.
2. Tolerance as follows: .xx = ±0.01 [xx = ±0.25], .xxx = ±0.005 [xxx = ±0.13]

### OUTLINE DRAWING

