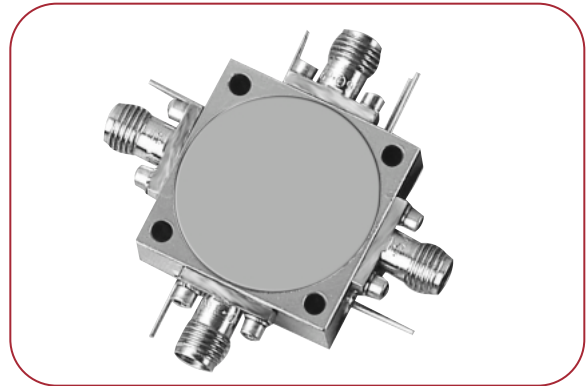


SINGLE-POLE THREE-THROW SWITCHES

FEATURES

- Multioctave bands 0.2 to 18 GHz
- Current or TTL control
- Low insertion loss
- High isolation
- Fast and high speed models
- Drop-in models available



Frequency Range (GHz)	Model Number	Insertion Loss (dB, Max.)	Isolation (dB, Min.)	VSWR (Max.)	Type	Rise/Fall Time (ns, Typ.)	On/Off Time (ns, Typ.)	On/Off Time (ns, Max.)	DC Power Positive (mA, Max.)	DC Power Negative (mA, Min.)
STANDARD, MULTIOCTAVE BAND MODELS										
0.2–2	SW3-002020RN1NF	1.6	70	1.6:1	Reflective	20/20	150	180	85	85
	SW3-002020AN1NF	2	75	1.6:1	Absorptive	20/20	150	180	85	85
0.5–2	SW3-005020RN1NF	1.5	80	1.6:1	Reflective	20/20	150	180	85	85
	SW3-005020AN1NF	1.9	75	1.6:1	Absorptive	20/20	150	180	85	85
2–8	SW3-020080RN1NF	1.9	80	1.7:1	Reflective	20/20	150	180	85	85
	SW3-020080AN1NF	2.1	70	1.7:1	Absorptive	20/20	150	180	85	85
4–12	SW3-040120RN1NF	2.4	90	1.7:1	Reflective	20/20	150	180	85	85
	SW3-040120AN1NF	2.5	65	1.7:1	Absorptive	20/20	150	180	85	85
2–18	SW3-020180RN1NF	3	80	2:1	Reflective	20/20	150	180	85	85
	SW3-020180AN1NF	3.2	60	2:1	Absorptive	20/20	150	180	85	85
1–18	SW3-010180RN1NF	3.1	70	2:1	Reflective	20/20	150	180	85	85
	SW3-010180AN1NF	3.4	60	2:1	Absorptive	20/20	150	180	85	85
OPTIMIZED PERFORMANCE MODEL										
1–1.1	SW3-010011AN1NF	1	40	1.2:1	Absorptive	500	700	1000	300	100

Electrical performance of multioctave models can be optimized over narrower bandwidths, or for a particular parameter. Electrical options include: Lower insertion loss, lower VSWR, higher isolation, high power and flat amplitude response. Mechanical/Control options include: Custom packaging, single supply operation, ultra-fast on/off time and BCD decoder. Consult MITEQ for options.

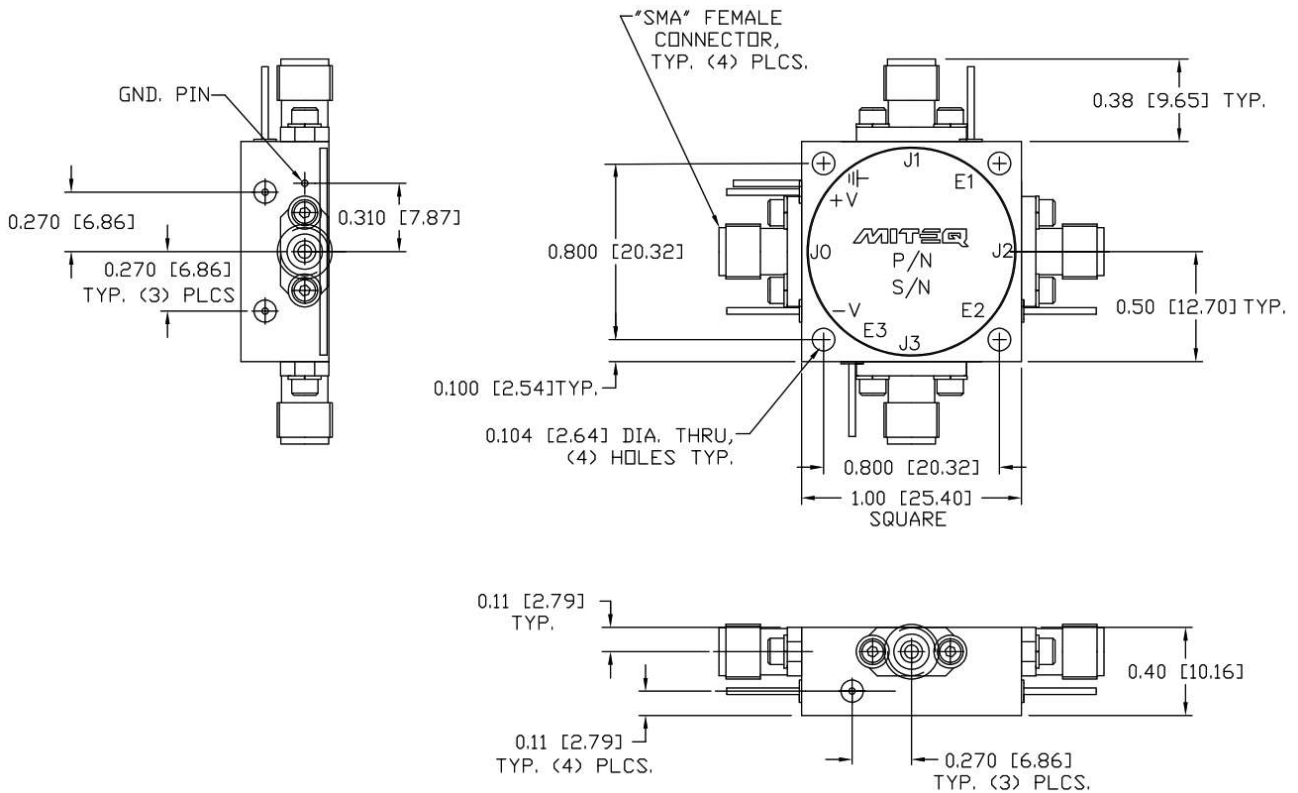
SINGLE-POLE THREE-THROW SWITCHES (CONT.)

TTL CONTROL LOGIC

Non-inverting	Logic 0 (low) (0 to 0.8 V)	Insertion loss	SP3T
	Logic 1 (high) (2.4 to 4.7 V)	Isolation	
Inverting	Logic 0 (low) (0 to 0.8 V)	Isolation	
	Logic 1 (high) (2.4 to 4.7 V)	Insertion loss	

Non-inverting Control Input			Signal Path	Inverting Control Input			Signal Path
E1	E2	E3		E1	E2	E3	
Low	High	High	J0 - J1	High	Low	Low	J0 - J1
High	Low	High	J0 - J2	Low	High	Low	J0 - J2
High	High	Low	J0 - J3	Low	Low	High	J0 - J3

SP3T OUTLINE DRAWING



GENERAL NOTES:

1. Dimensions shown in brackets [] are in millimeters.
2. Unless specified, all connectors are type SMA female field replaceable. SMA male also available, see ordering options.
3. Tolerance as follows:
 .xx = ±0.01 [xx = ±0.25]
 .xxx = ±0.005 [xxx = ±0.13]



SP3T SWITCH ORDERING INFORMATION

To order a switch, please include the model number derived from the following table. If requesting a quotation for a switch not listed in this catalog, please consult MITEQ. Include any additional specifications that are not listed.

	SW	3	-	020	180	A	N	1	N	F
SWITCH _____										
Number of throw(s) _____										
Frequency (100's of MHz)										
Lower frequency _____										
Upper frequency _____										
Type _____										
Absorptive A										
Reflective R										
Logic _____										
Non-inverting N										
Inverting I										
No driver X (See Note 1)										
Power Supply _____										
+5 V, -12 V 1										
+5 V, -5 V 2 (See Note 2)										
+5 V, -15 V 3										
+12 V, -12 V 4										
+15 V, -15 V 5										
No driver X										
Hermeticity _____										
Non-hermetic N										
Hermetic H										
Connectors _____										
SMA-Female F										
SMA-Male M										

Note 1: For "no driver" option, unit is current controlled through logic control pin, -20 mA for low loss condition and +20 mA for isolation state. Switching speeds are not measured on driverless units.

Note 2: This option has 0.2 dB higher insertion loss, on/off time is 150 ns maximum and rise/fall time is 30 ns typical.

AVAILABLE OPTIONS

- Add suffix AM Amplitude matching port-to-port
- Add suffix PM Phase matching port-to-port
- Add suffix VL1 Common port video filter
- Add suffix VL2 Output port(s) video filter
- Add suffix VL3 Both common port and output port(s) video filter
- Add suffix HP Higher power (alternate package configurations)

Example:

The above illustrated part number SW3-020180AN1NF is for the following:

- Switch SP3T
- 2 to 18 GHz
- Absorptive
- Non-inverting
- +5 V, -12 V
- Non-hermetic
- SMA-F connectors

Consult MITEQ for additional options.

When additional options are ordered, MITEQ will add a 4 digit number (-SXXXX) suffix to the part number.



MITEQ

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