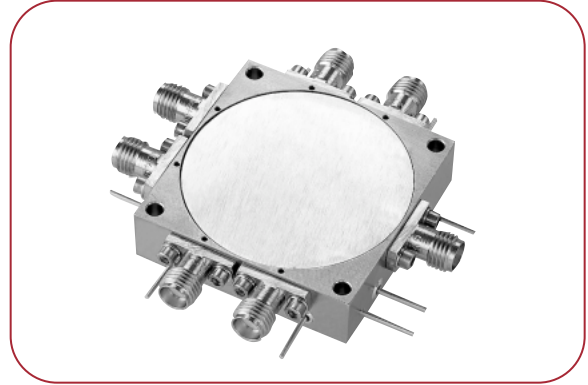


SINGLE-POLE SIX-THROW SWITCHES

FEATURES

- Multioctave bands 0.2 to 18 GHz
- Current or TTL control
- Low insertion loss
- High isolation
- Medium 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.)	Negative (mA, Min.)
STANDARD, MULTIOCTAVE BAND MODELS										
0.2–2	SW6-002020RN1NF	1.9	60	1.7:1	Reflective	20/20	150	180	160	160
	SW6-002020AN1NF	2.3	65	1.7:1	Absorptive	20/20	150	180	160	160
0.5–2	SW6-005020RN1NF	1.8	65	1.7:1	Reflective	20/20	150	180	160	160
	SW6-005020AN1NF	2.2	65	1.7:1	Absorptive	20/20	150	180	160	160
2–8	SW6-020080RN1NF	2.2	65	1.8:1	Reflective	20/20	150	180	160	160
	SW6-020080AN1NF	2.5	65	1.8:1	Absorptive	20/20	150	180	160	160
4–12	SW6-040120RN1NF	2.9	65	1.8:1	Reflective	20/20	150	180	160	160
	SW6-040120AN1NF	3.1	65	1.8:1	Absorptive	20/20	150	180	160	160
2–18	SW6-020180RN1NF	3.5	60	2:1	Reflective	20/20	150	180	160	160
	SW6-020180AN1NF	3.8	60	2:1	Absorptive	20/20	150	180	160	160
1–18	SW6-010180RN1NF	3.7	60	2:1	Reflective	20/20	150	180	160	160
	SW6-010180AN1NF	4	60	2:1	Absorptive	20/20	150	180	160	160
OPTIMIZED PERFORMANCE MODELS										
0.1–10	SW6-001100AN2NF	4	60	2:1	Absorptive	35/35	140	150	160	160
0.5–18	SW6-005180AN1NF	3.7	45	2:1	Absorptive	20/20	140	150	160	160

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.

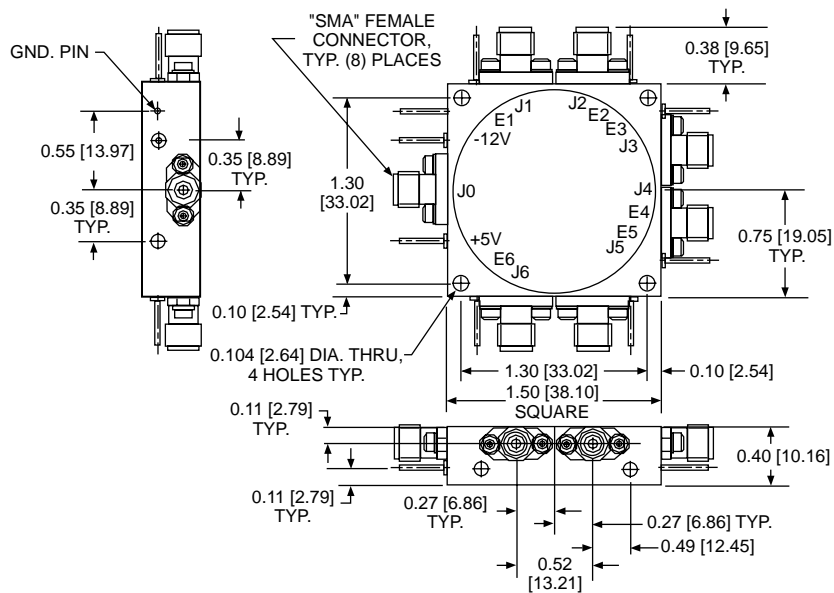
SINGLE-POLE SIX-THROW SWITCHES (CONT.)

TTL CONTROL LOGIC

Non-inverting	Logic 0 (low) (0 to 0.8 V)	Insertion loss
	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

SP6T	Non-inverting Control Input						Signal Path	Inverting Control Input						Signal Path
	E1	E2	E3	E4	E5	E6		E1	E2	E3	E4	E5	E6	
	Low	High	High	High	High	High	J0 - J1	High	Low	Low	Low	Low	Low	J0 - J1
	High	Low	High	High	High	High	J0 - J2	Low	High	Low	Low	Low	Low	J0 - J2
	High	High	Low	High	High	High	J0 - J3	Low	Low	High	Low	Low	Low	J0 - J3
	High	High	High	Low	High	High	J0 - J4	Low	Low	Low	High	Low	Low	J0 - J4
	High	High	High	High	Low	High	J0 - J5	Low	Low	Low	Low	High	Low	J0 - J5
	High	High	High	High	High	Low	J0 - J6	Low	Low	Low	Low	Low	High	J0 - J6

SP6T OUTLINE DRAWING



GENERAL NOTES:

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

SP6T 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.

	<u>SW</u>	<u>6</u>	<u>-</u>	<u>020</u>	<u>180</u>	<u>A</u>	<u>N</u>	<u>1</u>	<u>N</u>	<u>F</u>	
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 200 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 SW6-020180AN1NF is for the following:

Switch SP6T
 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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