

# SPST DIODE SWITCH

HIGH ISOLATION-REFLECTIVE AND ABSORPTIVE 0.02–18 GHz

# SERIES QB, QN

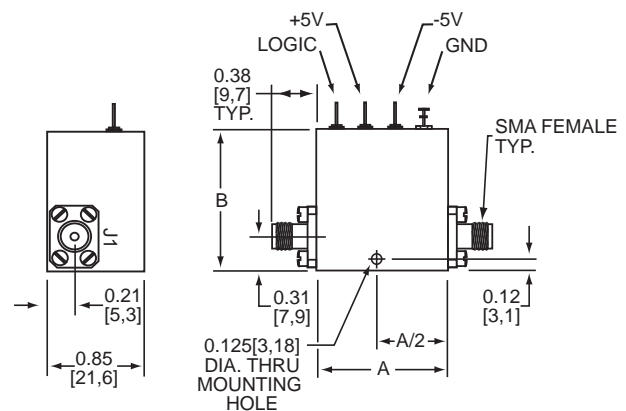
## GENERAL SPECIFICATIONS

<b>Frequency Coverage:</b>	0.02 to 18.0 GHz.
<b>RF Impedance:</b>	50 Ohms.
<b>RF Power:</b>	+20 dBm operational.
<b>DC Requirements:</b>	Switches without drivers require +50 mA maximum for the "off" condition. For the "on" condition all models require -5 volts at -60 mA maximum. Switches with drivers require $\pm 5$ volts @ $\pm 70$ mA. Logic is TTL "O" when on and "I" when off.
<b>Temperature Information:</b>	Operating temperature from -55°C to +85°C.
<b>Switching Speed:</b>	10% to 90% or 90% to 10% of RF. There is an additional 30 nanosec of driver delay.

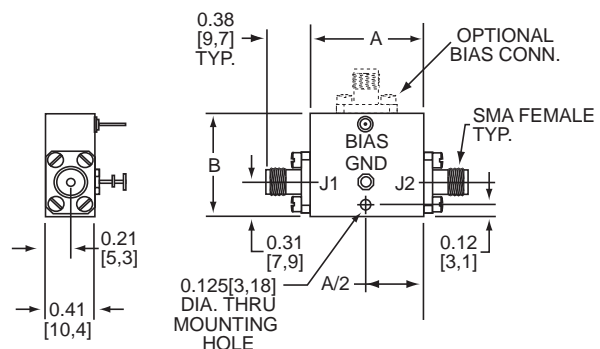


## MECHANICAL OUTLINES

Outline	A		B	
	Inches	[mm]	Inches	[mm]
1	0.91	[23,11]	0.76	[19,3]
2	1.10	[27,94]	1.26	[32,0]
3	1.00	[25,4]	1.06	[26,92]
4	1.10	[27,94]	0.71	[18,0]
5	0.90	[22,86]	1.11	[28,2]
6	1.10	[27,94]	1.16	[29,46]
7	1.50	[38,1]	1.16	[29,46]
8	1.50	[38,1]	1.31	[33,27]



OUTLINE WITH DRIVER J1-INPUT



OUTLINE WITHOUT DRIVER J1-INPUT

KEY: Inches[Millimeters] .XX  $\pm$  .03 .XXX  $\pm$  .010 [.X  $\pm$  0.8 .XX  $\pm$  0.25]

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## ELECTRICAL PERFORMANCE

Model No.	Driver	Frequency	Type	Isolation	Insertion loss	VSWR		Speed
		Range GHz	Abs./Refl.	Minimum dB	Maximum dB	Maximum	Outline	Nanosec.
QN-11 HA-1	NO	0.02-0.07	ABS	60	0.40	1.30	8	500
QB-14-HAD	YES	0.1-1.0	ABS	60	0.90	1.50	5	2,000
QB-16-HAD	YES	0.1-1.0	ABS	80	1.00	1.50	5	2,000
QB-21-HA-1	NO	0.1-2.0	ABS	80	1.35	1.50	5	500
QB-25-HAD	YES	0.25-0.5	ABS	80	1.00	1.50	5	2,000
QB-29-HAD	YES	0.25-1.0	ABS	80	1.00	1.50	5	2,000
QB-29-HAD-2	YES	0.25-1.0	ABS	80	1.00	1.50	5	20
QB-36-HAD-2	YES	0.5-2.0	ABS	80	1.20	1.50	5	20
QB-37-AD-1	YES	0.5-2.0	ABS	30	1.0	1.50	5	100
QN-24-HAD-2	YES	0.95-1.2	ABS	80	0.8	1.30	5	20
QB-38-HAD	YES	1.0-2.0	ABS	60	0.80	1.50	5	2,000
QB-41-HAD-2	YES	1.0-2.0	ABS	80	0.9	1.50	5	20
QB-41-HAD	YES	1.0-2.0	ABS	80	1.00	1.50	5	2,000
QB-41-HAD-1	YES	1.0-2.0	ABS	80	1.00	1.50	5	100
QN-27-HAD-2	YES	1.02-1.1	ABS	80	0.80	1.30	5	20
QN-30-HAD-2	YES	1.2-1.4	ABS	80	0.80	1.30	5	20
QN-30-HA-1	NO	1.2-1.4	ABS	80	0.75	1.30	5	100
QB-50-HAD-1	YES	1.5-3.0	ABS	60	1.10	1.50	5	100
QB-70-HAD	YES	2.0-18.0	ABS	60	2.70	2.50	6	2,000
QB-66D-2	YES	2.0-18.0	REFL	60	3.0	2.50	3	10
QB-56-HAD	YES	2.0-4.0	ABS	80	0.9	1.50	5	2,000
QB-56-HAD-2	YES	2.0-4.0	ABS	80	0.9	1.50	5	20
QB-54-HAD-2	YES	2.0-4.0	ABS	60	1.0	1.50	5	20
QB-53D-2	YES	2.0-4.0	REFL	80	1.0	1.50	2	10
QB-69-HAD	YES	4.0-8.0	ABS	80	1.30	1.50	7	2,000
QB-57-AD	YES	4.0-8.0	ABS	30	1.40	1.50	6	2,000
QB-76-HAD	YES	5.0-10.0	ABS	80	1.70	1.50	6	2,000
QB-76-HAD-1	YES	5.0-10.0	ABS	80	1.70	1.50	6	100
QB-74-HAD-1	YES	5.0-10.0	ABS	60	1.70	1.50	6	100
QB-78-HAD	YES	6.0-12.0	ABS	60	1.80	2.00	6	2,000
QB-78-HAD-1	YES	6.0-12.0	ABS	60	1.80	2.00	6	100
QB-81-HAD-2	YES	6.0-12.0	ABS	80	2.25	2.00	7	20
QB-83-HAD-2	YES	6.0-18.0	ABS	60	3.10	2.50	6	20
QB-81D	YES	7.0-12.4	REFL	60	1.70	1.60	3	2,000
QB-82D-2	YES	7.0-12.4	ABS	80	2.20	1.60	3	10
QB-89-HAD-2	YES	7.0-12.4	ABS	80	2.40	1.60	7	20
QB-90-HAD-2	YES	7.0-18.0	ABS	60	3.10	2.20	6	20
QB-90D-2	YES	8.0-18.0	ABS	80	3.25	2.00	3	10
QB-97-HAD	YES	12.0-18.0	ABS	60	2.70	2.00	6	2,000
QB-97-HAD-1	YES	12.0-18.0	ABS	60	2.70	2.00	6	100
QB-97-HAD-2	YES	12.0-18.0	ABS	60	2.70	2.00	6	100

KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]



8-10-07

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