

BROADBAND

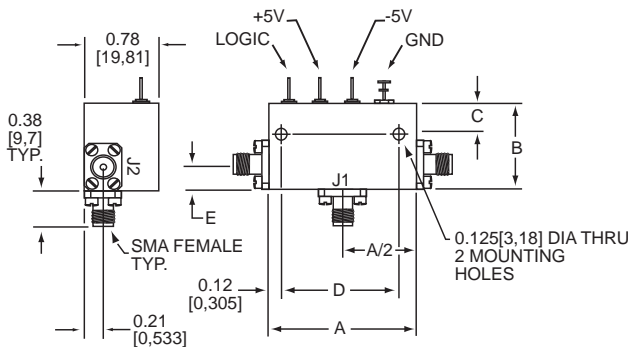
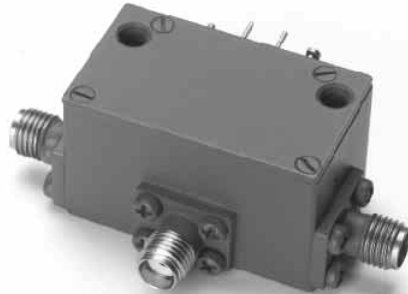
SPDT DIODE SWITCH

HIGH ISOLATION-REFLECTIVE AND ABSORPTIVE 0.02–18 GHz

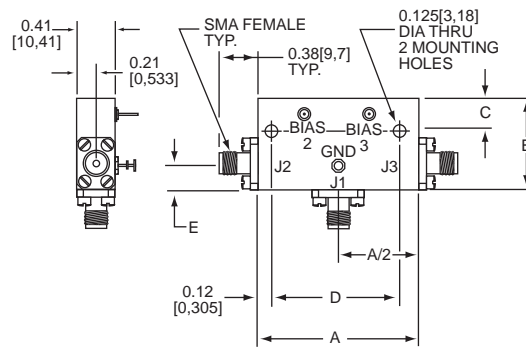
SERIES XB, XL, XN

GENERAL SPECIFICATIONS

Frequency Coverage:	0.02 to 18.0 GHz.
RF Impedance:	50 OHMS.
RF Power:	+20 dBm operational. Consult factory for high power options. 1 watt average, 10 watts peak survival.
DC Requirements:	Switches without drivers require +60 mA maximum per path for the "off" condition and -60 mA for the "on" condition. Switches with drivers require ±5 volt supply at ±130 mA. Logic "1" turns J2 "on" and J3 "off". Logic "0" turns J3 "on" and J2 "off".
Temperature Information:	Operating temperature from -55°C to +85°C.
Switching Speed:	10% to 90% or 90% to 10% of RF. There is an additional 30 nanosec of driver delay.
Connectors:	SMA.



OUTLINE WITH DRIVER J1-INPUT



OUTLINE WITHOUT DRIVER J1-INPUT

MECHANICAL OUTLINES

Outline	A in[mm]	B in[mm]	C in[mm]	D in[mm]	E in[mm]
1	1.55[39,37]	0.90[22,86]	0.30[7,6]	1.300[33,02]	0.25[6,4]
2	1.30[33,02]	0.75[19,1]	0.20[5,1]	1.050[26,7]	0.25[6,4]
3	1.55[39,37]	0.95[24,13]	0.30[7,6]	1.300[33,02]	0.35[8,9]
4	2.00[50,8]	1.00[25,4]	0.35[8,9]	1.750[4,45]	0.30[7,6]
5	1.55[39,37]	0.95[24,13]	0.30[7,6]	1.300[33,02]	0.25[6,4]
6	1.55[39,37]	1.20[30,48]	0.50[12,7]	1.300[33,02]	0.25[6,4]
7	1.55[39,37]	0.90[22,86]	0.30[7,6]	1.300[33,02]	0.25[6,4]

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

BROADBAND

SPDT DIODE SWITCH

SERIES XB, XL, XN

HIGH ISOLATION-REFLECTIVE AND ABSORPTIVE 0.02–18 GHz

ELECTRICAL PERFORMANCE

Model No.	Type	Driver Yes/No	Frequency Range (GHz)	Isolation Minimum dB	Insertion Loss Maximum dB	VSWR Maximum	Outline	Speed Nanosec.
XN-12	REFL	NO	0.02–0.07	80	0.40	1.45	1	2,000
XB-11-HAD-1	ABS	YES	0.02–0.1	60	0.75	1.65	4	500
XB-14-AD	REFL	YES	0.1–1.0	30	1.00	1.60	4	2,000
XB-17-HAD	ABS	YES	0.1–1.0	80	1.10	1.65	4	2,000
XB-15-HAD	ABS	YES	0.1–1.0	60	1.00	1.65	4	2,000
XB-20-HAD-1	ABS	YES	0.1–2.0	80	1.45	1.65	4	500
XN-17-HAD	ABS	YES	0.2–0.25	80	0.60	1.45	4	2,000
XB-21-AD-1	REFL	YES	0.25–0.5	30	1.05	1.60	4	500
XL-22D-1	REFL	YES	0.25–0.5	30	0.95	1.60	1	500
XB-37-HAD-2	ABS	YES	0.5–2.0	80	1.30	1.65	4	20
XB-35-HAD-1	ABS	YES	0.5–2.0	60	1.10	1.65	5	100
XL-31D-1	REFL	YES	0.5–2.0	30	1.00	1.60	2	100
XN-25-HAD	ABS	YES	0.95–1.22	60	0.75	1.45	5	2,000
XB-39-HAD	ABS	YES	1.0–2.0	60	0.90	1.65	5	2,000
XB-40-HAD-1	ABS	YES	1.0–2.0	80	1.10	1.65	4	100
XB-42-HAD-1	ABS	YES	1.0–4.0	60	1.10	1.65	5	100
XB-48-HAD	ABS	YES	1.0–6.0	80	1.30	1.65	4	2,000
XB-46-HAD-1	ABS	YES	1.0–6.0	60	1.30	1.65	5	100
XN-28-HAD	ABS	YES	1.02–1.10	60	0.75	1.45	5	2,000
XB-53-HAD-2	ABS	YES	1.5–3.0	80	1.20	1.65	4	20
XA-35D	REFL	YES	1.7–2.4	30	0.70	1.40	2	2,000
XB-55-HAD	ABS	YES	2.0–4.0	60	1.10	1.65	6	2,000
XB-57-HAD	ABS	YES	2.0–4.0	80	1.20	1.65	6	2,000
XB-59D-1	REFL	YES	2.0–8.0	60	1.30	1.65	3	100
XB-59-1	REFL	NO	2.0–8.0	60	1.30	1.65	3	100
XL-52D	ABS	YES	2.0–8.0	30	1.10	1.60	3	2,000
XN-44-HAD	ABS	YES	2.2–2.3	80	0.95	1.45	5	2,000
XN-46-HAD-1	ABS	YES	2.9–3.1	80	1.00	1.45	6	100
XB-66-HAD	ABS	YES	4.0–8.0	60	1.30	1.70	6	2,000
XB-68-HAD	ABS	YES	4.0–8.0	80	1.40	1.70	6	2,000
XB-65-AD	ABS	YES	4.0–8.0	30	1.40	1.60	6	2,000
XN-58D	REFL	YES	4.2–4.4	80	0.95	1.45	3	2,000
XN-47-AD-2	ABS	YES	5.4–5.9	30	1.20	1.50	6	20
XN-70-HAD-1	ABS	YES	5.4–5.9	80	1.40	1.45	6	100
XB-80-HAD-1	ABS	YES	6.0–12.0	80	2.10	1.90	7	100
XB-80-HAD	ABS	YES	6.0–12.0	80	2.00	1.90	7	2,000
XB-79-HA	ABS	NO	6.0–12.0	60	1.90	1.90	7	2,000
XB-79-1	REFL	NO	6.0–12.0	60	2.10	1.90	3	100
XB-84-HAD-2	ABS	YES	6.0–18.0	80	3.50	2.50	7	20
XB-88-HAD-1	ABS	YES	7.0–12.4	80	2.35	1.80	7	100
XB-88D-1	REFL	YES	7.0–12.4	80	2.25	1.80	2	100
XN-56-AD-2	ABS	YES	8.5–9.6	30	1.40	1.50	7	20
XN-77D	REFL	YES	8.5–9.6	60	1.40	1.45	7	2,000
XN-86-HAD	ABS	YES	9.8–10.4	60	1.50	1.45	7	2,000
XB-98-HAD-1	ABS	YES	12.0–18.0	60	3.10	2.30	7	100

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