

Plug-In Switch

50Ω SPDT Pin Diode Reflective 10 to 2500 MHz

PSW-1211



Generic photo used for illustration purposes only
CASE STYLE: A06

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power	+20 dBm
Control Current	5mA

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF IN	5
RF OUT 1	2
RF OUT 2	8
CONTROL 1	1
CONTROL 2	7
GROUND	3,4,6
CASE GND	3,6

Features

- wideband, 10 to 2500 MHz
- hermetic, metal case

Applications

- military, hi-rel application
- antenna switching
- UHF/VHF
- satellite communications
- test set-ups

Switch Electrical Specifications

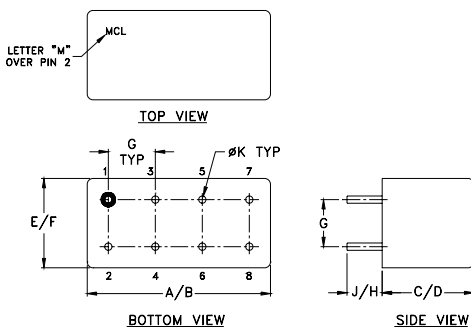
MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
	f_L	f_U	Low band lw		Upper band U		Frequency Band					
			Typ.	Max.	Typ.	Max.	L		M		U	
							Typ.	Min.	Typ.	Min.	Typ.	Min.
PSW-1211	10	2500	1.1	1.9	1.9	2.7	50	40	35	28	28	22

L= low range(f_L to 10 f_L)

M=mid range(10 f_L to $f_U/2$)
lw=low band (f_L to $f_L/2$)

U=upper range ($f_U/2$ to f_U)

Outline Drawing



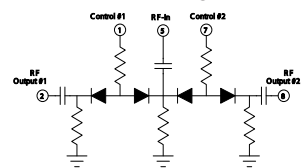
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.285	.310	.370	.400
19.56	20.32	7.24	7.87	9.40	10.16

G	H	J	K	wt
.200	.20	.14	.031	grams
5.08	5.08	3.56	0.79	5.2

Additional Specifications	
VSWR ("ON" STATE)	1.7 MAX.
SWITCHING TIME (μSEC)	4 MAX.
RISE TIME (μSEC)	2 TYP.
CONTROL VOLTAGE	ON condition OFF condition
	+5V 0V
1 dB COMPRESSION	10 to 200 MHz Above 200 MHz
	+6 increasing to +19 dBm +19 dBm min.

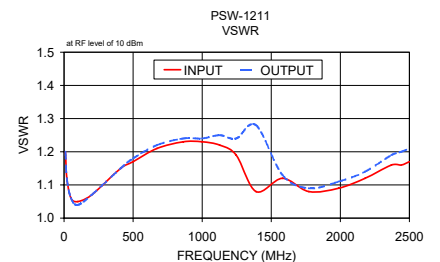
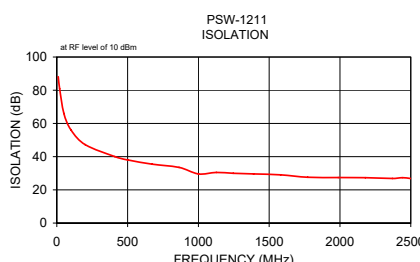
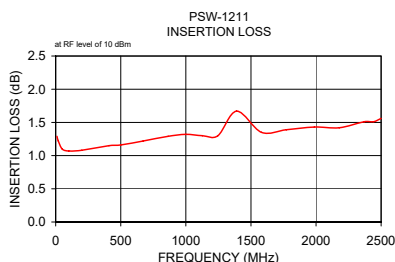
Control Logic



	CONTROL 1	CONTROL 2	RF OUT 2	RF OUT 1
State 1:	0V	+5V	ON	OFF
State 2:	+5V	0V	OFF	ON

Typical Performance Data

Freq. (MHz)	ON INSERTION LOSS (dB)				OFF INSERTION LOSS (dB)				ISOLATION (dB)		VSWR	
	IN-OUT		AMP. UNBAL		IN-OUT		DELTA		IN	OUT (RF 1)	ON	OFF
	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ	\bar{x}	\bar{x}	\bar{x}	\bar{x}
10.00	1.29	0.19	0.13	0.12	88.14	5.32	5.52	5.48	1.20	1.20	27.17	
20.00	1.22	0.14	0.09	0.06	80.95	3.49	5.99	5.45	1.12	1.12	25.49	
50.00	1.10	0.10	0.07	0.06	66.03	2.18	0.79	0.77	1.06	1.06	26.18	
100.00	1.07	0.09	0.07	0.06	56.13	2.48	0.63	1.00	1.05	1.04	24.91	
200.00	1.08	0.09	0.06	0.05	47.23	1.83	0.65	0.71	1.07	1.07	24.71	
409.45	1.15	0.08	0.07	0.05	40.05	1.43	0.45	0.39	1.15	1.15	23.36	
500.00	1.16	0.08	0.06	0.04	38.02	1.28	0.50	0.28	1.17	1.18	22.80	
672.45	1.22	0.08	0.06	0.04	35.50	1.05	0.49	0.36	1.21	1.22	21.45	
863.73	1.29	0.08	0.06	0.04	33.51	0.92	0.71	0.29	1.23	1.24	19.28	
1000.00	1.32	0.07	0.05	0.03	29.59	0.41	3.76	0.96	1.23	1.24	19.05	
1126.73	1.30	0.08	0.06	0.05	30.50	0.46	2.81	0.52	1.22	1.25	17.59	
1246.27	1.30	0.07	0.07	0.06	30.00	0.41	3.80	0.53	1.19	1.24	17.26	
1389.73	1.67	0.09	0.41	0.09	29.58	0.43	1.32	1.45	1.08	1.28	15.74	
1581.00	1.35	0.07	0.05	0.04	29.04	0.47	0.58	0.46	1.12	1.13	14.86	
1772.27	1.39	0.08	0.05	0.05	27.59	0.59	1.64	0.77	1.08	1.09	13.60	
1987.45	1.43	0.07	0.05	0.04	27.44	0.74	2.62	0.92	1.09	1.11	12.58	
2178.73	1.42	0.08	0.06	0.04	27.34	0.87	3.10	1.03	1.12	1.14	14.41	
2370.00	1.51	0.09	0.08	0.05	26.88	1.06	3.36	1.25	1.16	1.19	12.24	
2441.73	1.51	0.08	0.07	0.04	27.35	1.15	3.49	1.39	1.16	1.20	10.69	
2500.00	1.56	0.09	0.08	0.06	26.81	1.21	3.44	1.50	1.17	1.21	11.44	



Notes

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