

Coaxial Switch

50Ω SPST Pin Diode Reflective 10 to 2500 MHz

ZMSW-1111



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.	

Coaxial/Pin Connections

RF IN	COM
RF OUT 2	RF-2
CONTROL 1	1
CONTROL 2	2

Features

- wideband, 10 to 2500 MHz
- good isolation, 35 dB typ.

Applications

- UHF/VHF
- satellite communications
- antenna switching
- test set-ups

CASE STYLE: JJ77

Connectors	Model	Price	Qty.
SMA	ZMSW-1111	\$69.95	(1-9)

Switch Electrical Specifications

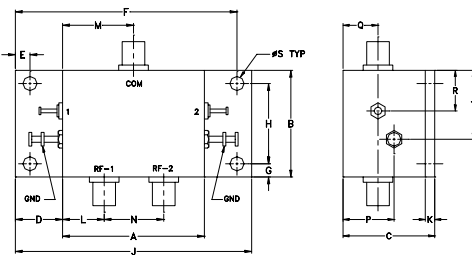
MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
			Low band lw		Upper band U		Frequency Band					
			Typ.	Max.	Typ.	Max.	L		M		U	
ZMSW-1111	10	2500	1.1	1.9	1.9	2.7	50	45	35	28	28	22

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	G	H	J	
1.50	1.13	.97	.50	.155	2.345	.14	.850	2.50	
38.10	28.70	24.64	12.70	3.94	59.56	3.56	21.59	63.50	
K	L	M	N	P	Q	R	S	T	wt
.10	.44	.75	.63	.54	.37	.43	.150	.73	grams
2.54	11.18	19.05	16.00	13.72	9.40	10.92	3.81	18.54	50.0

Additional Specifications

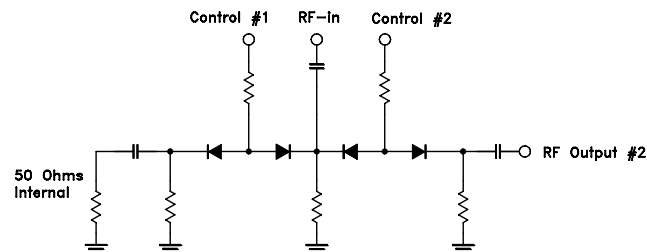
VSWR ("ON" STATE)	1.7 Max.
SWITCHING TIME (μSEC)	4 Max.
RISE TIME (μSEC)	2 Typ.
CONTROL VOLTAGE	
ON condition	+5V
OFF condition	0V
1 dB COMPRESSION	
10 to 200 MHz	+6 increasing to +19
Above 200 MHz	dBm
	+19 dBm min.

LOGIC

	CON-TROL 1	CON-TROL 2	RF-2
State 1:	0V	+5V	ON
State 2:	+5V	0V	OFF*

*Absorptive at RF IN

Electrical Schematic



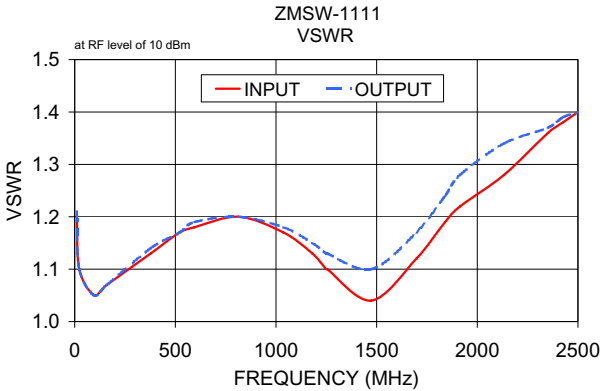
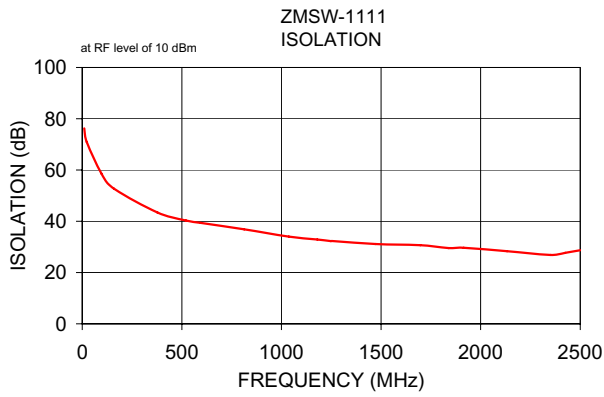
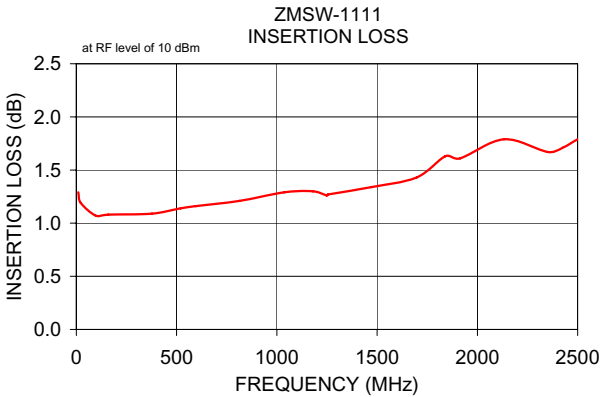
Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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Typical Performance Data

FREQ. (MHz)	ON INSERTION LOSS (dB) (Ctrl1 @ 0V, Ctrl2 @ 5V)		OFF ISOLATION (dB) (Ctrl1 @ 5V, Ctrl2 @ 0V)		VSWR		
	\bar{x}	σ	\bar{x}	σ	IN	OUT	OFF
10.00	1.29	0.11	76.25	6.59	1.20	1.21	30.07
22.45	1.19	0.10	70.93	4.23	1.10	1.10	30.07
97.15	1.07	0.07	58.52	1.61	1.05	1.05	27.77
159.40	1.08	0.05	52.73	1.00	1.07	1.07	25.87
377.28	1.09	0.06	43.44	0.67	1.13	1.14	19.20
520.45	1.14	0.05	40.30	0.80	1.17	1.17	15.71
595.15	1.16	0.06	39.39	0.70	1.18	1.19	14.22
813.03	1.21	0.06	36.87	0.68	1.20	1.20	11.58
1037.13	1.29	0.06	34.02	0.70	1.17	1.18	10.27
1180.30	1.30	0.06	32.88	0.61	1.13	1.15	10.35
1248.78	1.26	0.06	32.28	0.66	1.10	1.13	10.47
1255.00	1.27	0.06	32.32	0.69	1.10	1.13	10.50
1472.88	1.34	0.05	31.11	0.62	1.04	1.10	12.99
1696.98	1.43	0.07	30.68	0.62	1.12	1.17	23.96
1840.15	1.63	0.09	29.53	0.60	1.19	1.24	76.42
1914.85	1.61	0.08	29.66	0.67	1.22	1.28	429.47
2132.73	1.79	0.09	28.33	0.92	1.28	1.34	42.78
2350.60	1.67	0.07	26.88	1.15	1.36	1.37	205.26
2425.30	1.71	0.07	27.69	1.12	1.38	1.39	152.56
2500.00	1.79	0.09	28.69	1.09	1.40	1.40	62.42



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