

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

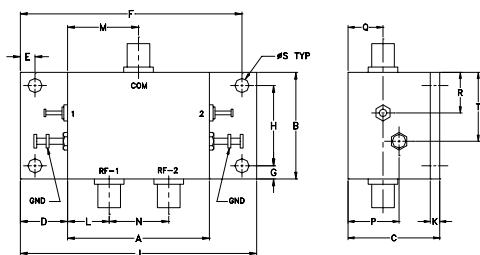
MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
			Low band		Upper band		Frequency Band					
			Lw		U		L		M		U	
			Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.
ZMSW-1111	10	2500	1.1	1.9	1.9	2.7	50	45	35	28	28	22

L= low range(f_L to 10 f_L)

M=mid range(10 f_L to $f_U/2$)
U=upper range ($f_U/2$ to f_U)

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

Outline Drawing



Outline Dimensions (inch)

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

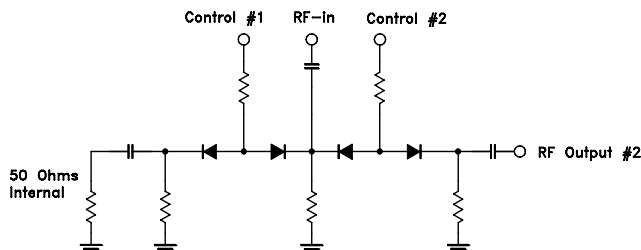
VSWR ("ON" STATE)	1.7 Max
SWITCHING TIME (μSEC)	4 Max.
RISE TIME (μSEC)	2 Typ.
CONTROL VOLTAGE	
ON condition	+5V
OFF condition	0V
1 dB COMPRESSION	
10 to 200 MHz	+6 increasing to +19
Above 200 MHz	dBm
	+19 dBm min.

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



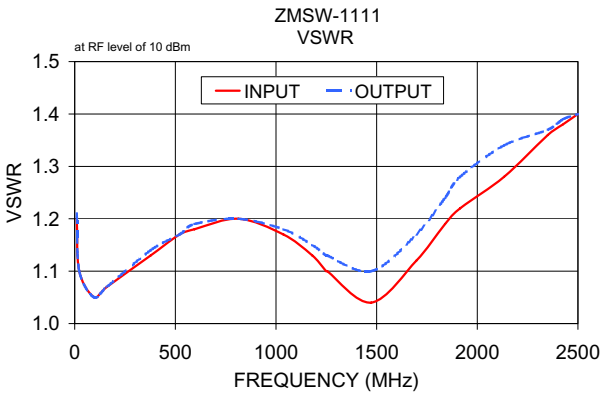
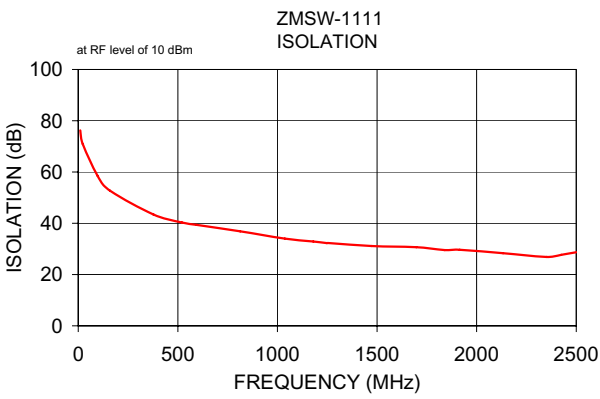
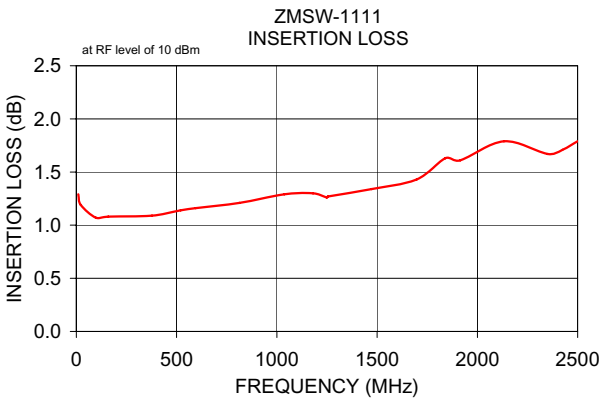
Notes

- A. 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.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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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 $\bar{x}$	OUT $\frac{ON}{\bar{x}}$	OFF $\bar{x}$
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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