

Coaxial Switch

50Ω SPDT Pin Diode, Reflective TTL Driver 10 to 3000 MHz

ZSDR-230+



Generic photo used for illustration purposes only

CASE STYLE: CCC127

Connectors	Model
SMA	ZSDR-230+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power	L(+20 dBm), M(+28 dBm), U(+30 dBm)
Supply V	+6V max.
Permanent damage may occur if any of these limits are exceeded.	

Coaxial/Pin Connections

RF IN	COM
RF OUT 1	RF-1
RF OUT 2	RF-2
TTL-IN	TTL
+5V	+5V

Features

- wideband, 10 to 3000 MHz
- high isolation, 40 dB typ.

Applications

- test set-ups
- antenna switching
- satellite communications

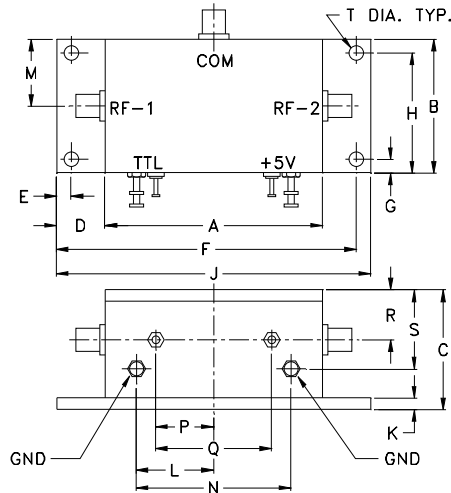
Switch Electrical Specifications

MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
	f _L	f _U	Low band		Upper band		Frequency Band					
			Typ.	Max.	Typ.	Max.	L		M		U	
ZSDR-230+	10	3000	1.3	1.9	1.8	2.7	Typ.	Min.	Typ.	Min.	Typ.	Min.

L= low range (f_L to 10 f_L)

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

Outline Drawing



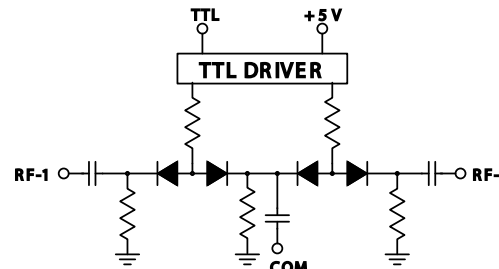
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
2.25	1.38	1.24	.50	.150	3.100	.138	1.238	3.25
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45	82.55
K	L	M	N	P	Q	R	S	T
.12	.80	.69	1.60	.60	1.200	.52	.82	.150
3.05	20.32	17.53	40.64	15.24	30.48	13.21	20.83	3.81
								wt
								80.0

Additional Specifications

VSWR ("ON" STATE)	1.3 Typ., 1.9 Max.
SWITCHING TIME (μSEC)	2.0 Typ., 4.0 Max.
SUPPLY VOLTAGE	+5V
SUPPLY CURRENT	10mA Max.
TTL INPUT HIGH THRESHOLD	2V Min.
TTL INPUT LOW THRESHOLD	0.8V Max.
1 dB COMPRESSION	+6 increasing to +19 dBm +19 dBm min.

Control Logic



TTL LOGIC		
TTL 1:	RF-1/OFF	RF-2/ON
TTL 0:	RF-1/ON	RF-2/OFF

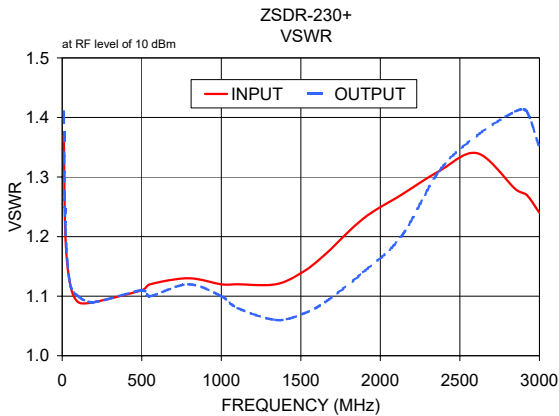
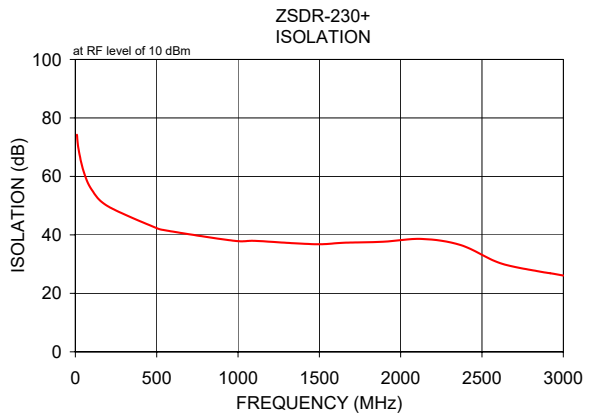
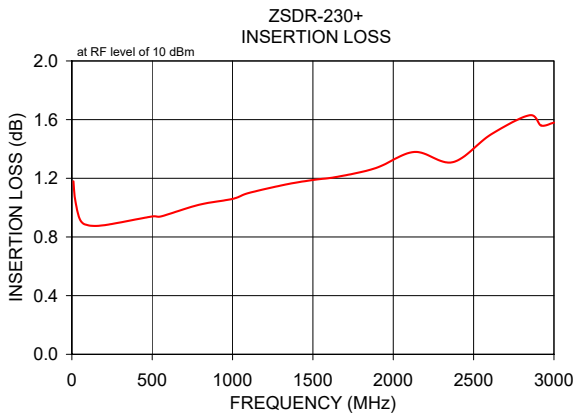
Notes

- 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.
- 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 (TTL LOW @ 0V) IN-OUT		INSERTION LOSS (dB) AMP. UNBAL.		OFF (TTL HIGH @ 5V) IN-OUT		ISOLATION (dB) DELTA		IN	VSWR OUT (RF 1)	
	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ		ON	OFF
10.00	1.18	0.04	0.03	0.02	74.26	1.60	1.14	0.39	1.37	1.41	31.26
20.00	1.06	0.05	0.05	0.05	69.20	1.46	1.45	1.51	1.20	1.22	30.31
50.00	0.92	0.03	0.02	0.01	61.84	1.14	1.60	1.01	1.12	1.12	30.07
100.00	0.88	0.03	0.02	0.01	55.48	0.61	0.75	0.63	1.09	1.10	30.07
200.00	0.88	0.02	0.02	0.01	49.81	0.72	0.64	0.70	1.09	1.09	30.49
500.00	0.94	0.02	0.02	0.01	42.32	0.56	0.53	0.77	1.11	1.11	29.97
552.91	0.94	0.02	0.01	0.01	41.56	0.50	0.61	0.74	1.12	1.10	28.88
792.00	1.02	0.01	0.01	0.01	39.41	0.46	0.68	0.76	1.13	1.12	26.27
1000.00	1.06	0.01	0.01	0.01	37.86	0.40	0.67	0.71	1.12	1.10	24.84
1102.82	1.10	0.01	0.01	0.01	37.96	0.40	0.70	0.73	1.12	1.08	22.83
1341.91	1.16	0.01	0.02	0.01	37.13	0.42	0.94	0.69	1.12	1.06	21.66
1509.27	1.19	0.02	0.02	0.01	36.81	0.45	0.96	0.75	1.14	1.07	20.69
1652.73	1.21	0.01	0.02	0.01	37.32	0.53	0.89	0.79	1.17	1.09	19.92
1891.82	1.27	0.02	0.02	0.02	37.64	0.67	1.82	0.71	1.23	1.14	19.28
2130.91	1.38	0.02	0.02	0.03	38.60	1.13	0.82	0.94	1.27	1.20	24.87
2370.00	1.31	0.02	0.03	0.03	36.48	3.02	2.00	1.04	1.31	1.31	19.46
2609.09	1.50	0.04	0.06	0.03	30.37	2.46	0.49	0.56	1.34	1.37	11.80
2848.18	1.63	0.06	0.04	0.02	27.51	2.19	0.30	0.21	1.28	1.41	10.49
2919.91	1.56	0.04	0.03	0.02	26.87	2.12	0.56	0.28	1.27	1.41	9.46
3000.00	1.58	0.04	0.05	0.03	26.08	2.02	0.86	0.48	1.24	1.35	11.35



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