

Coaxial Switch

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

ZSDR-230+



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.

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

CASE STYLE: CCC127

Connectors	Model	Price	Qty.
SMA	ZSDR-230+	\$89.95	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

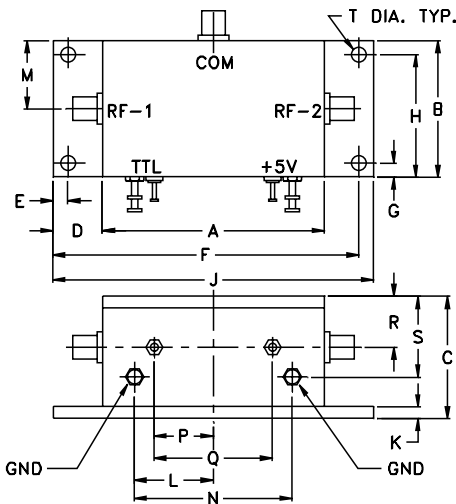
Switch Electrical Specifications

MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
			Low band		Upper band		Frequency Band					
			Lw	U	L	M	U					
ZSDR-230+	f_l	f_u	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.
	10	3000	1.3	1.9	1.8	2.7	60	40	40	28	35	22

L= low range(f_l to $10 f_l$)

M=mid range($10 f_l$ to $f_u/2$)
U=upper range ($f_l/2$ to f_u)

Outline Drawing



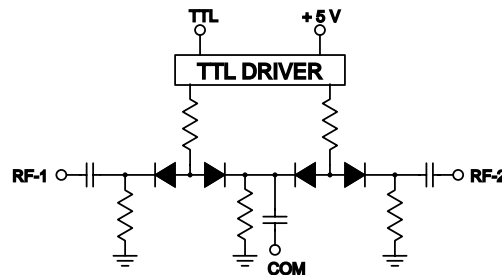
Outline Dimensions (inch/mm)

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	10 to 100 MHz Above 100 MHz
	+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

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RF/IF MICROWAVE COMPONENTS

REV. B
M113397
ZSDR-230+
WP/CP/AM
071029

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

