

Coaxial Switch

50Ω SP4T Pin Diode, TTL Driver 10 to 2500 MHz

ZSDR-425



CASE STYLE: GGG126

Connectors	Model	Price	Qty.
SMA	ZSDR-425	\$109.95	(1-9)

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	RF-IN
RF OUT 1	RF-1
RF OUT 2	RF-2
RF OUT 3	RF-3
RF OUT 4	RF-4
TTL-1	TTL-1
TTL-2	TTL-2
+5V	+5V

Features

- wideband, 10 to 2500 MHz
- high isolation, 40 dB typ.

Applications

- test set-ups
- antenna switching
- satellite communication

Electrical Specifications (T_{AMB}=25°C)

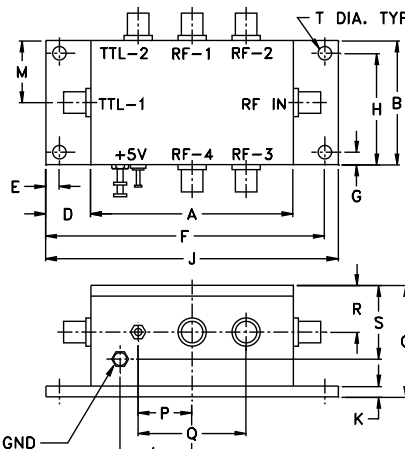
MODEL NO.	FREQ. (MHz)		INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)					
			Low band lw		Upper band U		L		M		U	
	f _L	f _U	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.
ZSDR-425	10	2500	1.1	1.7	1.5	2.5	60	40	40	30	35	22

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_U/2)

U=upper range (f_U/2 to f_U)

Outline Drawing



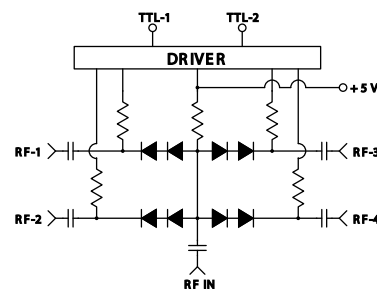
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K
2.25	1.38	1.24	.50	.150	3.100	.138	1.238	.30	.12
57.15	35.05	31.50	12.70	3.81	78.74	3.51	31.45	7.62	3.05
L	M	N	P	Q	R	S	T	wt	
.80	.69	--	.60	1.200	.52	.82	.150	grams	
20.32	17.53	--	15.24	30.48	13.21	20.83	3.81	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	TTL-2
RF-1	1	0
RF-2	1	1
RF-3	0	1
RF-4	0	0

Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED
IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

REV. OR
M97979
ZSDR-425
WP/CP/AM
071113

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		VSWR		
	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ	\bar{x}	σ	\bar{x}	OUT (RF 1)	OFF
										ON	
10.00	1.22	0.16	0.18	0.15	74.41	4.10	9.64	5.24	1.35	1.40	27.25
20.00	1.06	0.12	0.15	0.12	70.64	2.69	8.25	4.56	1.19	1.22	27.08
50.00	0.97	0.09	0.13	0.09	61.72	2.10	8.97	7.88	1.11	1.13	27.42
100.00	0.94	0.09	0.12	0.09	56.09	1.46	6.48	2.94	1.10	1.11	26.82
200.00	0.90	0.08	0.12	0.08	49.80	1.51	6.32	3.03	1.13	1.12	26.58
408.40	1.01	0.07	0.11	0.07	45.66	1.36	5.61	1.32	1.21	1.18	26.03
500.00	1.06	0.08	0.12	0.09	44.93	1.43	5.49	1.62	1.25	1.20	24.98
669.85	1.10	0.07	0.12	0.07	44.06	1.59	5.94	1.86	1.30	1.24	24.36
856.60	1.30	0.07	0.13	0.08	43.15	1.93	6.13	2.01	1.35	1.25	22.45
1000.00	1.39	0.05	0.11	0.07	44.52	3.69	8.35	2.97	1.37	1.24	20.59
1118.05	1.48	0.05	0.13	0.07	42.72	2.91	8.56	3.40	1.37	1.23	19.44
1250.00	1.37	0.06	0.13	0.06	42.75	2.61	10.05	4.95	1.36	1.22	19.15
1391.95	1.51	0.09	0.16	0.07	44.07	3.21	10.73	3.71	1.34	1.20	18.57
1578.70	1.47	0.05	0.15	0.05	40.41	2.62	9.61	3.27	1.31	1.16	17.15
1777.90	1.52	0.05	0.17	0.05	37.07	2.87	9.43	3.26	1.30	1.14	16.04
2002.00	1.66	0.12	0.20	0.08	34.27	3.55	9.08	1.82	1.30	1.16	13.88
2176.30	1.81	0.09	0.20	0.08	30.64	3.24	7.16	1.46	1.30	1.21	12.25
2363.05	1.82	0.07	0.19	0.04	26.86	2.95	5.63	1.07	1.28	1.28	9.41
2437.75	2.08	0.14	0.24	0.05	25.66	2.78	5.42	1.03	1.29	1.30	7.81
2500.00	2.14	0.16	0.25	0.05	25.03	2.28	5.15	1.27	1.30	1.31	7.10

