

Mini-Circuits

SPDT

GaAs, reflective and absorptive
dc to 5 GHz

case style selection

see case style outline drawings



VSWA
VSW



YSWA
YSW



ZYSWA
ZYSW

A-29-25
T-51-11

			REFLECT. T.	ABSORB. T.	INSERTION LOSS, dB FREQUENCY BAND						1dB COMPRESSION, dBm FREQUENCY BAND						IN-OUT ISOLATION dB						PRICE	DISTRIBUTOR	
MODEL NO.		FREQ. GHz			A		B		C		A		B		C		A		B		C		Qty. (1-9)	FACTORY	LOCAL
					Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.			
VSW	VSW-2-50DR	DC-5	●	1.0	1.5	1.2	1.7	1.5	2.1	20	15	20	19	24	22	50	41	40	32	28	22	42.95	●	●	
case AG-191	VSWA-2-50DR	DC-5	●	1.1	1.5	1.4	1.9	1.9	2.7	18	13	20	17	22.5	20	50	38	38	27	30	19	43.95	●	●	
o YSW	YSW-2-50DR	DC-5	●	0.9	1.5	1.3	1.7	1.4	2.1	20	15	20	19	24	22	50	41	40	32	28	22	19.95	●	●	
case KKK-155	YSWA-2-50DR	DC-5	●	1.1	1.5	1.4	1.9	1.9	2.7	18	13	20	17	22.5	20	42	38	31	27	20	19	23.95	●	●	
ZYSW	ZYSW-2-50DR	DC-5	●	0.9	1.5	1.3	1.7	1.4	2.1	20	15	20	19	24	22	50	41	40	32	28	22	59.95	●	●	
case ZZ-121	ZYSA-2-50DR	DC-5	●	1.1	1.5	1.4	1.9	1.9	2.7	18	13	20	17	22.5	20	42	38	31	27	20	19	69.95	●	●	

A=DC to 500MHz

B=500MHz to 2000MHz

C=2000MHz to 5000MHz

*Typical isolation at 5 MHz, is 80 dB and decreases 5 dB/octave from 5-1000 MHz.

ADDITIONAL SPECIFICATIONS

	MIN.	TYP.	MAX.	UNITS
VSWR (ON)	—	1.4	2.0	
@ VIDEO BREAK THROUGH TO RF	—	30	—	mV P-P
RISE/FALL TIME (10% TO 90%)	—	1.5	3.0	nsec
SWITCHING TIME	—	—	—	—
(FROM 50% TTL TO 90% RF)	—	3.0	5.0	nsec
POSITIVE SUPPLY VOLTAGE (PIN-19)	4.5	5.0	5.5	V
NEGATIVE SUPPLY VOLTAGE (PIN-7)	4.5	5.0	5.5	V
+5 V POWER SUPPLY CURRENT	—	12	20	mA
-5 V POWER SUPPLY CURRENT	—	12	20	mA
TTL LOGIC				
TTL INPUT HIGH	ΔRF-OUT #1 OFF, RF-OUT #2 ON			
TTL INPUT LOW	ΔRF-OUT #2 OFF, RF-OUT #1 ON			
TTL SPECS				
TTL VOLTAGE	0	—	5.5	V
TTL TOGGLE RATE	0	80	—	MHz
TTL INPUT				
HIGH, THRESHOLD	2.0	—	—	V
HIGH, CURRENT	—	2	5	mA
LOW, THRESHOLD	—	—	0.8	V
LOW, CURRENT	—	—	0.2	mA

△ For YSW-2-50DR, ZYSW-2-50DR OFF state of RF output is low impedance.

@ Video break thru is defined as leakage of TTL switching signal to RF output ports.

TEMPERATURE				
OPERATING	-55	—	85	°C
STORAGE	-62	—	100	°C
MAX. RF INPUT (No Damage)*				
DC-2 GHz	—	—	+22	dBm
2-5 GHz	—	—	+24	dBm

• For YSWA-2-50DR: +20dBm at "OFF" port, +24 dBm total

□ NON-HERMETIC

○ Tape and Reel available. Please consult factory.

PIN CONFIGURATION

FUNCTION	VSW, YSW	ZYSW PORT
RF-IN	4	3
RF-OUT 1	12	2
RF-OUT 2	14	1
TTL-IN	2	4
+5V	19	+5 VDC
-5V	7	-5 VDC
No Connection	9, 17	—
GND	1,3,5,6,8,10,11 13,15,16,18,20	GND

features

- excellent repeatability, specification limits 4.5 σ typical from mean.
- high isolation, 80 dB typical at 5 MHz.
- low video break thru, 30 mV P-P typical.
- very fast switching, 3 nsec typical.
- low DC power consumption, 120 mW typical.
- YSW/A-2-50DR available in tape & reel.

In Stock...Immediate Delivery

