

SWITCHES, PIN DIODE

1 MHz to 3 GHz (Hermetic)



MODEL PREFIX	FREQUENCY (MHz)	TYPE	TTL DRIVER	INSERTION LOSS (dB)				IN-OUT ISOLATION (dB)						RISE TIME (µsec)	SWITCHING TIME (µsec)	
				low-band		upper band		Frequency Band								
				Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.			
	f _L -f _U															

SPDT, SP4T

PSW-1211	10-2500	SPDT		1.1	1.9	1.9	2.7	50	40	35	28	28	22	2	—	4
TOSW-230	10-3000	SPDT		1.3	1.9	1.8	2.7	60	40	40	28	35	22	—	2	4
TOSW-425	10-2500	SP4T		1.1	1.7	1.5	2.5	60	40	40	30	35	22	—	2	4

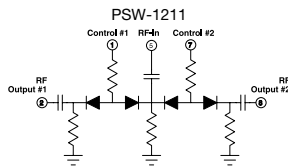
L = low range (f_L to $10f_L$)

lw = low band (f_L to $f_U/2$)

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

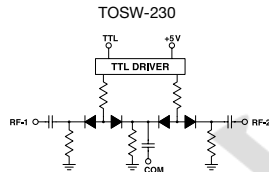
U = upper range ($f_U/2$ to f_U)

ELECTRICAL SCHEMATICS & TRUTH TABLES



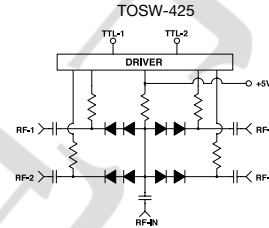
Control Ports		RF Out port	
1	2	1	2
0 V	V	OFF	ON
V	0	ON	OFF

V = 5 V



	RF Out port	
TTL	1	2
Low	ON	OFF
High	OFF	ON

Low: 0 to 0.8 V
High: 2 to 5 V



TTL-1	TTL-2	RF Out port			
		1	2	3	4
High	Low	ON	OFF	OFF	OFF
High	High	OFF	ON	OFF	OFF
Low	High	OFF	OFF	ON	OFF
Low	Low	OFF	OFF	OFF	ON

Low: 0 to 0.8 V
High: 2 to 5 V



MODEL PREFIX	FREQUENCY (MHz)		INSERTION LOSS (dB) (± 20 mA)				MAXIMUM INPUT POWER (dBm) (± 20 mA)		IN-OUT ISOLATION (0mA)						BI-PHASE $\bar{X}$ (± 20 mA) Typ.			
	In	Con	Mid-Band		Total Range		1 dB compr.	no damage	Frequency Band		Typ.		Typ.		Δ AMP (dB)	m	Total Range	Phase (deg) deviation from 180°

BI-PHASE

GAS-1	5-450	DC-0.05	3.3	4.0	3.5	5.0	20	25	60	48	45	35	35	25	0.10	0.10	1.0	1.5
GAS-2	10-1000	DC-0.05	4.3	6.0	5.2	8.5	20	25	55	40	35	25	28	20	0.10	0.30	1.5	3.0
PAS-1	5-450	DC-0.05	3.5	4.0	3.5	4.7	20	29	65	50	45	35	35	25	0.10	0.10	0.5	1.2
PAS-2	10-1000	DC-0.05	4.0	6.0	6.5	8.5	20	29	50	40	40	30	35	25	0.10	0.30	0.5	1.0
PAS-3	1-200	DC-0.05	1.4	2.0	1.6	2.5	15	29	65	50	50	40	50	35	0.10	0.10	0.5	1.0
PAS-2000	100-2000	DC-0.50	4.2	6.5	5.4	7.5	19	25	30	22	—	—	26	20	0.30	0.40	5.0	8.0
TFAS-1	2-400	DC-0.05	1.4	2.0	1.6	3.0	20	25	65	45	45	33	35	25	0.10	0.10	1.0	2.0
TFAS-2	10-1000	DC-0.50	3.7	4.5	5.0	8.0	17	25	50	30	42	20	31	20	0.10	0.20	2.0	3.0

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

lw = low band (f_L to $f_U/2$)

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

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

m = ($2f_L$ to $f_U/2$)

ELECTRICAL SCHEMATICS & SUGGESTED CONTROL PORT BIASING CONFIGURATION

