



SWITCHES, SEMI-CONDUCTOR GaAs & CMOS 50 Ω

DC to 6 GHz



MODEL PREFIX	FREQUENCY (MHz) f_L - f_U	ABSORPTIVE REFLECTIVE	INSERTION LOSS (dB) Frequency Band Typ. Max.	1 dB COMPRESSION (dBm) Typ.	IN-OUT ISOLATION (dB) Frequency Band Typ. Min.
SPST					
Without Drivers					
DC to 2000 MHz					
KSWHA-1-20	DC-2000	•	1.3 1.7	26	65 58
SPDT					
Without Drivers					
DC to 4600 MHz					
KSW-2-46	DC-4600	•	1.3 2.8	20	50 28
KSWA-2-46	DC-4600	•	1.5 2.6	20	50 25
RSW-2-25P	DC-2500	•	1.0 1.8	29	48 43
MSW-2-20	DC-2000	•	0.7 1.3	27	34 20
MSWA-2-20	DC-2000	•	1.2 1.5	27	37 25
SPDT					
With TTL Drivers					
DC to 4500 MHz					
M3SW-2-50DR	DC-4500	•	0.9 1.9	25	50 30
M3SWA-2-50DR	DC-4500	•	0.9 2.0	25	57 30
SWM-2-50DR	DC-4500	•	0.9 1.9	25	50 27
SWMA-2-50DR	DC-4500	•	0.9 1.9	25	55 27
With CMOS Drivers					
DC to 6000 MHz					
HSWA2-30DR	DC-3000	•	0.9 1.4	31	55 44
CSWA2-63DR	DC-6000	•	1.1 1.8	27	50 44
VSWA2-63DR	500-6000	•	1.2 1.9	27	46 38
TRANSFER					
Without Drivers					
DC to 2000 MHz					
MSWT-4-20	DC-2000	•	1.25 2.2	28	34 15
SP4T					
With TTL Drivers					
DC to 3000 MHz					
GSWA-4-30DR	DC-3000	•	2.0 3.9	25	40 26

CONTROL LOGIC

CSWA2-63DR, VSWA2-63DR		
State of Control Voltage	Switch State - RF Common to	
	RF1	RF2
Low	ON	OFF
High	OFF	ON
ON - low insertion loss state OFF - Isolation state		

HSWA2-30DR			
CONTROL INPUT		RF INPUT/OUTPUT	
Control 1	Control 2	RF1 to RF Common	RF2 to RF Common
Low	Low	OFF	OFF
Low	High	OFF	ON
High	Low	ON	OFF
High	High	N/A	N/A

Low: 0 to 0.3 Vdd
High: 0.7 Vdd to Vd
Vdd: 2.7 to 3.3 V

MSWT-4-20				
Control Ports				"On" Path (other paths are ("OFF"))
1	2	3	4	
0	-V	-V	-V	$T_x J_2$
-V	0	-V	-V	$T_x J_1$
-V	-V	0	-V	$R_x J_1$
-V	-V	-V	0	$R_x J_2$
0	-V	0	-V	$T_x J_2$ & $R_x J_1$
-V	0	-V	0	$T_x J_1$ & $R_x J_2$

V= 5 to 8 V

RSW-2-25			
Control Ports		RF outputs	
1	2	1	2
LOW	HIGH	ON	OFF
HIGH	LOW	OFF	ON

Low: 0+/-0.2 V
High: Vs -0.2 to Vs
Vs: 5 to 7 V

SPDT and SPST Switches without Drivers						
		KSW-2-46 KSWA-2-46 MSW-2-20	MSWA-2-20		KSWHA-1-20	
Control Ports		RF outputs	RF outputs		RF out	
1	2	1	2	1	2	
-V	0	ON	OFF	ON	OFF	ON
0	-V	OFF	ON	OFF	ON	OFF

V= 5 to 8 V

SP4T Switch with Driver: GSWA-4-30DR							
Control Ports				RF outputs			
1	2	3	4	1	2	3	4
Low	High	High	High	ON	OFF	OFF	OFF
High	Low	High	High	OFF	ON	OFF	OFF
High	High	Low	High	OFF	OFF	ON	OFF
High	High	High	Low	OFF	OFF	OFF	ON

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

SPDT Switches with TTL Drivers: M3SW-2-50DR, M3SWA-2-50DR, SWM-2-50DR and SWMA-2-50DR		
Control Port	RF outputs	
	1	2
Low	ON	OFF
High	OFF	ON

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

