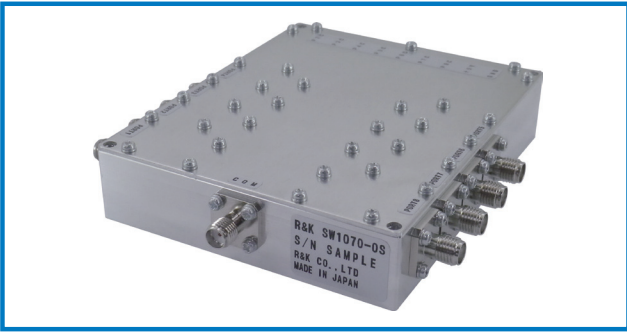


# RF SWITCH SP8T

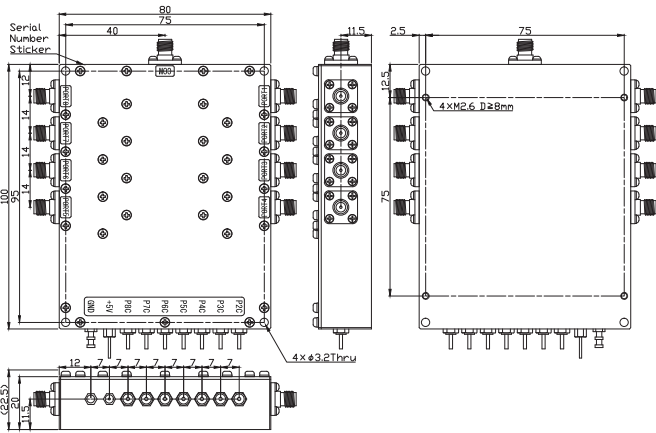


## R&K-SW1070-0S



### OUTLINE DRAWING

※IN MILLIMETERS



- Single Pole 8 Throw (SP8T) Switch
- 9kHz~6000MHz Operation
- Absorptive
- Low Cost
- Hi-Isolation
- Pin max. +31dBm
- RoHS Compliance

### SPECIFICATIONS

Frequency Range : 9kHz ~ 6000MHz  
 Insertion Loss : 4dB (max.)  
 Isolation (9kHz ~ 3GHz) : 70dB (min.)  
 (3GHz ~ 6GHz) : 60dB (min.)  
 Impedance : 50Ω  
 Return Loss (All Ports) : 15dB (typ.)  
 Input Power 1dB Comp. : +31dBm (min.) @2GHz  
 Input IP3 : +55dBm (typ.) @2GHz  
 Maximum RF Input Power : +31dBm Through @2GHz  
 +18dBm Terminated @2GHz  
 Switching Speed (Turn On) : 250ns (typ.) / 50% Cont. to 90% RF  
 (Turn Off) : 200ns (typ.) / 50% Cont. to 10% RF

### Control Logic

P2 Cont.	P3 Cont.	P4 Cont.	P5 Cont.	P6 Cont.	P7 Cont.	P8 Cont.	Status
H	H	H	H	H	H	H	Port1
L	H	H	H	H	H	H	Port2
H	L	H	H	H	H	H	Port3
H	H	L	H	H	H	H	Port4
H	H	H	L	H	H	H	Port5
H	H	H	H	L	H	H	Port6
H	H	H	H	H	L	H	Port7
H	H	H	H	H	H	L	Port8

※H = +5V C-MOS H or Open / L = +5V C-MOS L or Short to GND.

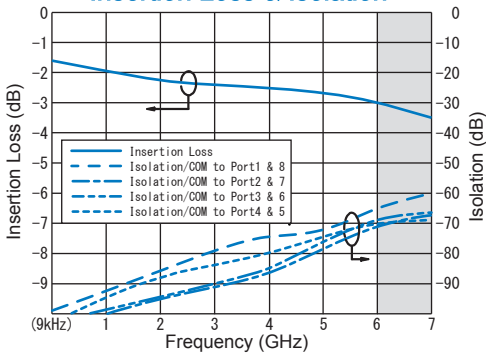
DC Supply Input : +5V ±0.5V / 120mA (max.)  
 Operating Temperature : -25°C to +85°C  
 Storage Temperature : -25°C to +85°C  
 Connectors : SMA-FEMALE  
 Weight : 300g (typ.)

### HOW TO ORDER

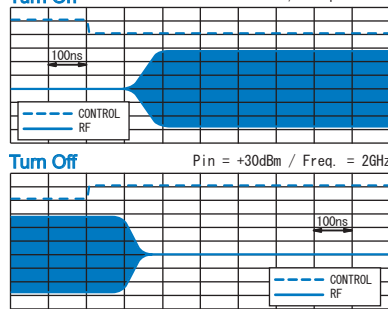
Model Name : R&K-SW1070-0S  
 No Option

### TYPICAL PERFORMANCE

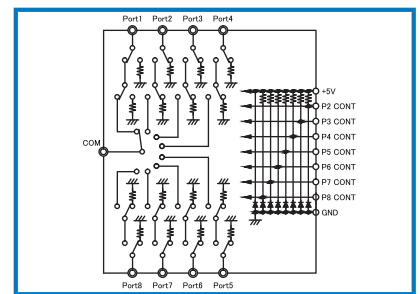
#### Insertion Loss & Isolation



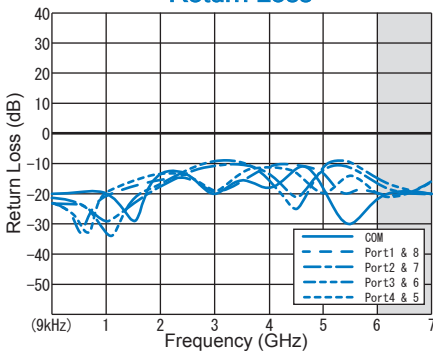
#### Switching Speed



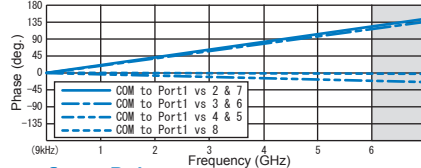
### SCHEMATIC



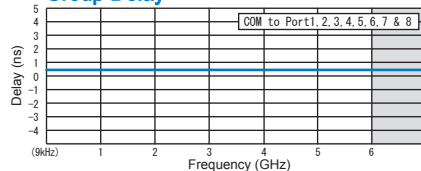
#### Return Loss



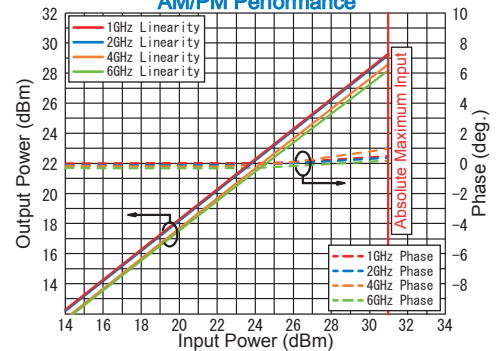
#### Phase Difference



#### Group Delay



#### Input vs Output Linearity & Phase



R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, the export of R&K products from Japan may be subject to an export license by the government of Japan, based on Japan's "Foreign Exchange and Foreign Trade Law".

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