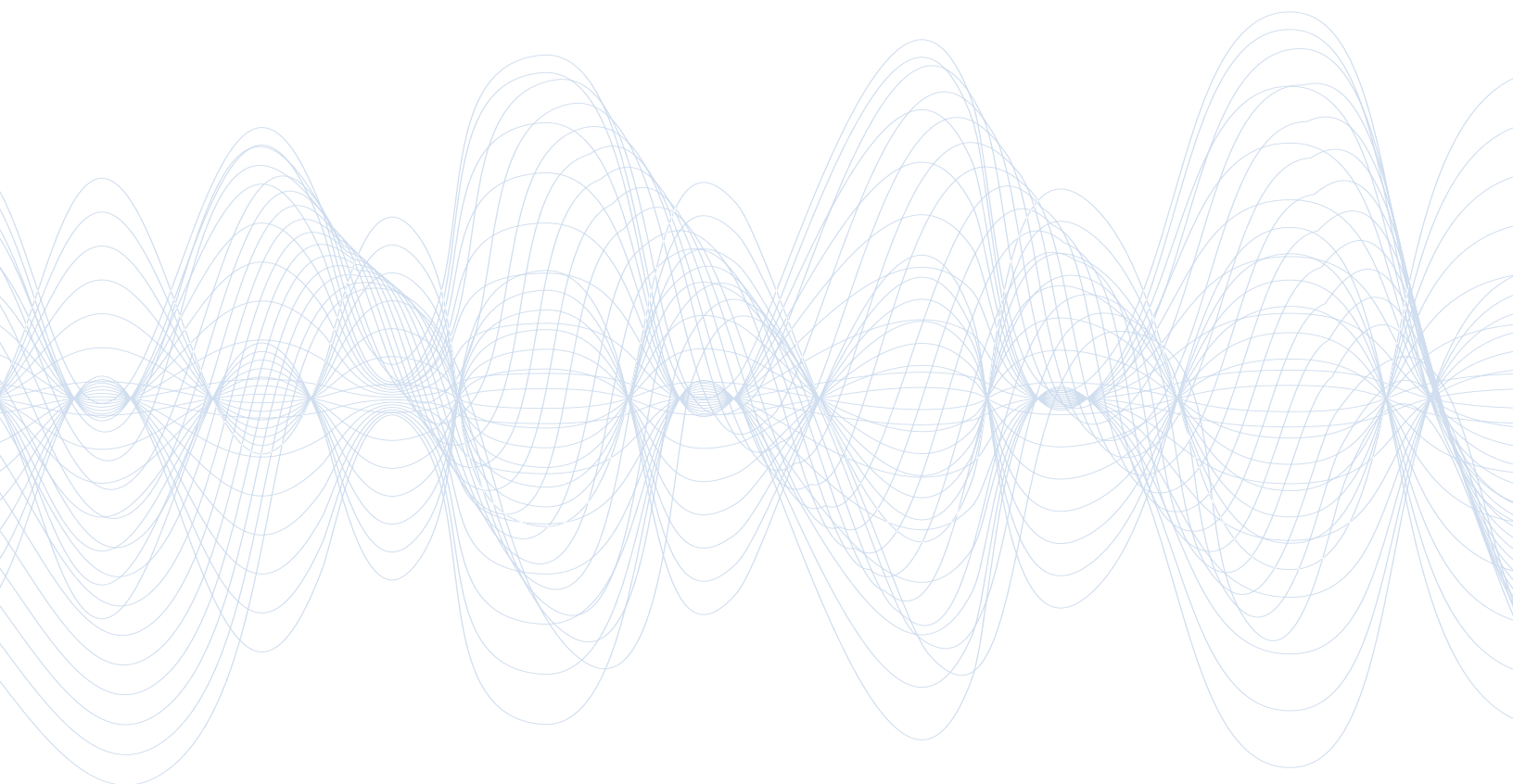


# LOW PIM COAXIAL SWITCH



**DowKey® Microwave**  
CORPORATION

A **DOVER** COMPANY



- DC-18 GHz
- Below -160 dBc
- RoHS Compliant
- Low/Medium Power
- 1M Life Cycles

## Standard Options

Switch Type	Part Number	"D" Connector	Indicator
SPDT	401JW-4X08-ROHS	9 Pin	No
SPDT	401JW-4X0832-ROHS	9 Pin	Yes
DPDT	411CJW-4X08-ROHS	9 Pin	No
DPDT	411CJW-4X0832-ROHS	9 Pin	Yes
SP6T	461JLW-4X08-ROHS	15 Pin	No
SP6T	461JLW-4X0822-ROHS	15 Pin	Yes
SP8T	581JW-4X08-ROHS	25 Pin	No
SP8T	581JW-4X0822-ROHS	25 Pin	Yes
SP12T	5C1JW-4X08-ROHS	37 Pin	No
SP12T	5C1JW-4X0852-ROHS	37 Pin	Yes

Note: X = 12 or 28 Vdc. Other options may be available. Please consult with the factory.

## Specifications

### Operating Voltage (across temperature range):

12 Vdc (11-14 Vdc)  
28 Vdc (24-32 Vdc)

### Coil Current (max. @ nom. Vdc & 25°C)\*:

SPDT: 12 Vdc 75 mA  
28 Vdc 120 mA  
DPDT: 12 Vdc 250 mA  
28 Vdc 180 mA  
SP6T: 12 Vdc 570 mA  
28 Vdc 180 mA  
SP8T: 12 Vdc 415 mA  
28 Vdc 180 mA  
SP12T: 12 Vdc 650 mA  
28 Vdc 500 mA

### Switching Time:

SPDT, SP6T & SP8T: 15 ms maximum  
DPDT: 20 ms maximum  
SP12T: 30 ms maximum

### Operating Temperature:

-25°C to +65°C (Standard)

### Mechanical Life Cycles:

1,000,000 minimum

### Vibration, Operating:

10G RMS, 20-2000 Hz

### Mechanical Shock, Non-Operating:

30G, 1/2 Sine, 11 ms

### Nominal Weight\*:

SPDT: 1.7 oz. (48 g.)  
DPDT: 3.8 oz. (108 g.)  
SP6T: 8.5 oz. (240 g.)  
SP8T: 10.5 oz. (298 g.)  
SP12T: 18.0 oz. (510 g.)

\* Performance and weight may vary. Please consult with the factory.

## RF Characteristics

### SPDT

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-1	1.10	85	0.10	200
1-4	1.15	80	0.15	150
4-8	1.20	70	0.20	125
8-12	1.30	65	0.30	75
12-18	1.35	60	0.35	60

### DPDT

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-1	1.10	85	0.10	200
1-4	1.20	80	0.20	150
4-8	1.30	70	0.30	125
8-12	1.40	65	0.40	75
12-18	1.50	60	0.50	60

### SP6T & SP8T

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *	
				SP6T	SP8T
DC-4	1.20	85	0.20	100	100
4-8	1.30	75	0.30	50	70
8-12.4	1.40	70	0.40	35	60
12.4-18	1.50	60	0.50	25	50

### SP12T

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-4	1.20	70	0.20	100
4-8	1.40	65	0.40	70
8-12.4	1.50	60	0.60	60
12.4-18	1.80	60	0.80	50

\* RF Power (Watts CW MAX)



- DC-12.4 GHz
- Below -160 dBc
- RoHS Compliant
- Low/Medium Power
- 1M Life Cycles

## Standard Options

Switch Type	Part Number	"D" Connector	Indicator
SPDT	402JW-4X01-ROHS	9 Pin	No
SPDT	402JW-4X0132-ROHS	9 Pin	Yes
DPDT	412JW-4X01-ROHS	9 Pin	No
DPDT	412JW-4X0132-ROHS	9 Pin	Yes
SP6T	561JW-4X01-ROHS	15 Pin	No
SP6T	561JW-4X0122-ROHS	15 Pin	Yes

Note: X = 12 or 24 Vdc. Other options may be available. Please consult with factory.

## Specifications

### Operating Voltage (across temperature range):

12 Vdc (11-14 Vdc)  
24 Vdc (20-28 Vdc)

### Coil Current (max. @ nom. Vdc & 25°C)\*:

SPDT: 12 Vdc 320 mA  
24 Vdc 180 mA  
DPDT: 12 Vdc 250 mA  
24 Vdc 240 mA  
SP6T: 12 Vdc 550 mA  
24 Vdc 275 mA

### Switching Time:

SPDT: 20 ms maximum  
DPDT: 20 ms maximum  
SP6T: 20 ms maximum

### Operating Temperature:

-25°C to +65°C (Standard)

### Mechanical Life Cycles:

1,000,000 minimum

### Vibration, Operating:

10G RMS, 20-2000 Hz

### Mechanical Shock, Non-Operating:

30G, 1/2 Sine, 11 ms

### Nominal Weight\*:

SPDT: 6.5 oz. (184 g.)  
DPDT: 8.5 oz. (241 g.)  
SP6T: 17.0 oz. (482 g.)

\* Performance and weight may vary. Please consult with the factory.

## RF Characteristics

### SPDT

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-1	1.15	85	0.15	600
1-2	1.20	80	0.20	400
2-4	1.25	70	0.25	300
4-8	1.45	60	0.40	200
8-12.4	1.50	60	0.50	175

### DPDT

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-1	1.15	85	0.15	200
1-2	1.20	80	0.20	150
2-4	1.25	70	0.25	125
4-8	1.45	60	0.40	75
8-12.4	1.60	60	0.60	60

### SP6T

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power (Watts) *
DC-4	1.25	70	0.30	175
4-8	1.35	60	0.40	125
8-12.4	1.70	55	0.70	100

\* RF Power (Watts CW MAX)