SK16-0521836575-SFSF-A8

SP16T PIN Switch with TTL Driver, Absorptive, 0.5 to 18 GHz

SK16-0521836575-SFSF-A8 is an absorptive PIN diode-based, single pole, sixteen-throw switch with a TTL driver that operates between 0.5 and 18 GHz. The switch requires a separate -5 V and +5 V biasingf in addition to the 4-Bit TTL control. This model offers in-line 16 output ports, typical 6.5 dB insertion loss, and 75 dB minimum isolation with a typical switching speed of 50 nanoseconds. The switch has female SMA connectors for all RF ports and Micro-D15 Male connectors for bias and TTL control.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.5 GHz		18 GHz
Insertion Loss		6.5 dB	8.0 dB
Isolation	75 dB		
Return Loss	8 dB	13 dB	
RF Input Power			+28 dBm
RF Input Power (Damage)			+30 dBm
Bias (Positive)	+4.75 V_{DC}	+5.00 V_{DC}/ 750 mA	+5.25 V_{DC}
Bias (Negative)	-5.25 V_{DC}	-5.00 V_{DC}/ 50 mA	-4.75 V_{DC}
Control		4-Bit TTL	
Switching Speed		50 ns	100 ns
Switch Type		Absorptive	
Specification Temperature		+25 °C	
Operating Temperature	-25 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	SMA Female
Bias & Control Port	Micro-D15 Male
Case Material	Aluminum
Finish	Gold Plated
Weight	7.1 Oz
Outline	K16-AC-Z2

ECCN

EAR99

FEATURES

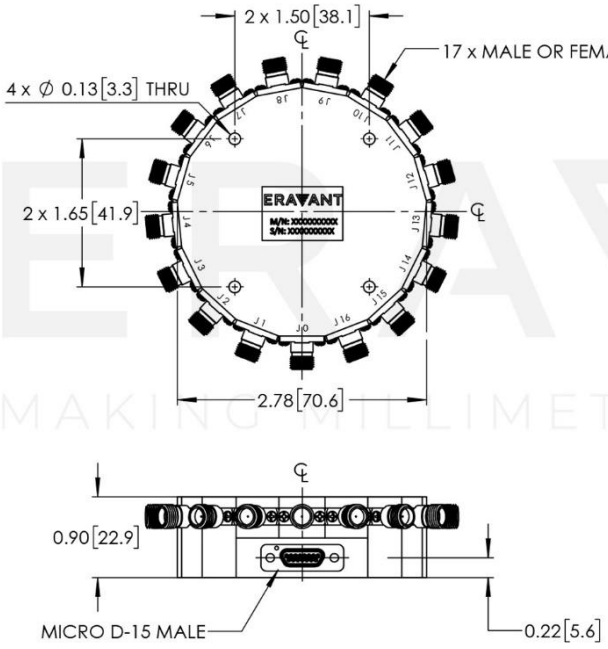
- Low Insertion Loss
- High Isolation
- Absorptive
- TTL Controlled

APPLICATIONS

- Automatic Test Equipment
- Switching Network

SUPPLEMENTAL DETAILS

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



MICRO-D15 Male Define	
1	C1
2	C2
3	C3
4	C4
5	NC
6	NC
7	NC
8	NC
9	GND
10	+5V
11	-5V
12	GND
13	+5V
14	-5V
15	NC

Truth Table				
Control Input TTL				Signal Path State
C4	C3	C2	C1	
0	0	0	0	J0-J1
0	0	0	1	J0-J2
0	0	1	0	J0-J3
0	0	1	1	J0-J4
0	1	0	0	J0-J5
0	1	0	1	J0-J6
0	1	1	0	J0-J7
0	1	1	1	J0-J8
1	0	0	0	J0-J9
1	0	0	1	J0-J10
1	0	0	1	J0-J11
1	0	1	1	J0-J12
1	1	0	0	J0-J13
1	1	0	1	J0-J14
1	1	1	0	J0-J15
1	1	1	1	J0-J16

NOTE:

- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Reversing polarity will destroy the device.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.