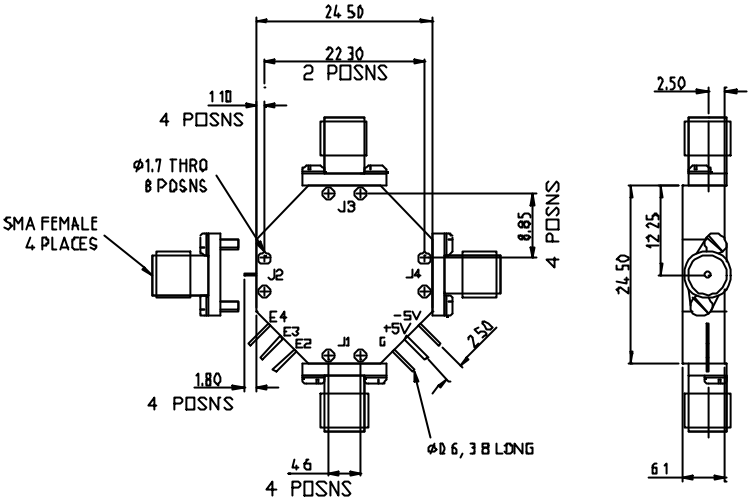
SP3T PIN Diode Switches
0.5 to 18.0GHz
Non-Reflective

SMS
Specialist Microwave Solutions



Features:

- Removable SMA Connectors
- Integral TTL Compatible Drivers
- Internally Terminated
- Miniature Outline
- Very Fast Switching
- Low Loss and High Isolation

Description:

The SMS-331-00DT range of SP3T PIN diode switches are packaged in miniature, silver plated housings with SMA connectors. The SMA connectors can be removed to allow direct integration into microstrip circuits if required and all units contain TTL compatible drivers. Ports J2, J3 and J4 are internally terminated to maintain VSWR when the switch is isolating. Optional surface finish is available, see note below for options.

Specifications: (indicated values @ +25° C)

Frequency Range (GHz)	Max Insertion Loss (dB)	Max VSWR (Ratio)	Min Isolation (dB)	Max Switching Speed (ns)	Max Power Peak/CW (mW)	Part Number
0.5 – 2.0	1.6	1.5:1	50	30	100	SMS-331-01DT
0.5 – 6.0	2.1	1.6:1	50	30	100	SMS-331-02DT
6.0 – 12.0	2.8	1.7:1	60	30	100	SMS-331-03DT
12.0 – 18.0	3.4	1.9:1	55	30	100	SMS-331-04DT
6.0 – 18.0	3.4	1.9:1	55	30	100	SMS-331-05DT
0.5 – 18.0	3.4	1.9:1	55	30	100	SMS-331-06DT

Notes:

1. Power supplies: +5V @ 100mA max, -5V @ 50mA max.
2. Total switching time is defined as 50% TTL to 10/90% detected RF.
3. 3 Individual TTL compatible control lines are provided. TTL '0' = low loss, TTL'1' = isolation.
4. TTL Control Voltage should be = or < positive supply voltage at all times.
5. Operating temperature range –40° to +85° C. Storage temperature range –55° to +125° C.
6. Third angle projection, all dimensions in mm.
7. Port J1 = RF common , Port J2 = RF input/output, Port J3 = RF input/output, Port J4 = RF input/output.
8. **Options:**
   Add the following identifiers as suffixes to the part numbers above, i.e. SMS-331-01DT**P**.
   P = Finish Matt black paint to DTD5555A.
   The switch is available without integral drivers to allow users to externally optimise bias levels. Please consult the factory for detail information.

Please contact the factory for any custom requirements or applications assistance.

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All specifications subject to change without notice