### **Technical Data Sheet**



SP6T Terminated Ramses SMA 18GHz Normally open 12Vdc BCD TTL

Diodes D-sub connector

PAGE 1/2 ISSUE 06-02-18 SERIE : SPnT PART NUMBER : R574402685

#### RF CHARACTERISTICS

Number of ways : 6

Frequency range : 0 - 18 GHz Impedance : 50 Ohms

Frequency (GHz)	DC - 3	3 - 8	8 - 12.4	12.4 - 18
VSWR max	1.20	1.30	1.40	1.50
Insertion loss max	0.20 dB	0.30 dB	0.40 dB	0.50 dB
Isolation min	80 dB	70 dB	60 dB	60 dB
Average power (*)	240 W	150 W	120 W	100 W

TERMINATION IMPEDANCE : 50 Ohms

TERM. AVG. POWER AT 25° C : 1 W per termination / 3 W total power

#### **ELECTRICAL CHARACTERISTICS**

Actuator : NORMALLY OPEN

Nominal current \*\* : 250 mA

Actuator voltage (Vcc) : 12V (10.2 to 13V)

Terminals : 25 pins D-SUB male connector BCD inputs (E) - High level : 3.5 to 5.5 V / 800µA at 5.5 V

- Low level : 0 to 1.5 V / 20µA at 0.8 V

### MECHANICAL CHARACTERISTICS

Connectors : SMA female per MIL-C 39012 Life : 2 million cycles per position

Switching Time\*\*\* : <15 ms

Construction : Splashproof

Weight : < 250 g

#### **ENVIRONMENTAL CHARACTERISTICS**

Operating temperature range : -40°C to +85°C
Storage temperature range : -55°C to +85°C

(\* Average power at 25°C per RF Path)

(\*\* At 25° C ±10%)

(\*\*\* Nominal voltage; 25° C)



# **Technical Data Sheet**



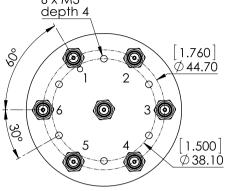
SP6T Terminated Ramses SMA 18GHz Normally open 12Vdc BCD TTL

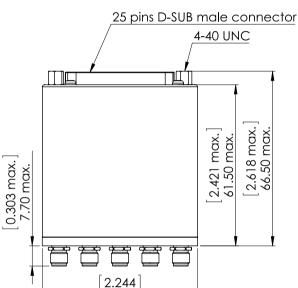
Diodes D-sub connector

PAGE 2/2 ISSUE 06-02-18 SERIE : SPnT PART NUMBER : R574402685

DRAWING

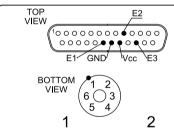
6 x M3 depth 4





BCD TRUTH TABLE				
E3	E2	E1	RF continuity	
0	0	0	Last Position	
1	1	1	All ports open	
0	0	1	$IN \leftrightarrow 1$	
0	1	0	$IN \leftrightarrow 2$	
0	1	1	$IN \leftrightarrow 3$	
1	0	0	$IN \leftrightarrow 4$	
1	0	1	IN ↔ 5	
1	1	0	IN ↔ 6	

# LABEL



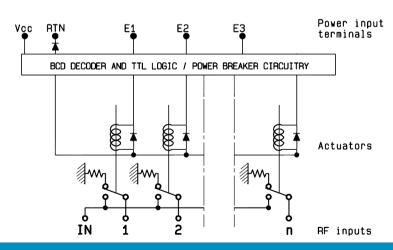
RADIALL® R574402685 0 - 18 GHz Un : 12V Lot : \_\_\_\_



General tolerances :  $\pm 0.5$  mm [0,02 in]

Ø 57

#### SCHEMATIC DIAGRAM



This document contains proprietary information and such information shall not be disclosed to any third party for any purpose whatsoever or used for manufacturing purposes without prior written agreement from Radiall. The data defined in this document are given as an indication, in the effort to improve our products; we reserve the right to make any changes judged necessary.