



**18 GHz SMA LATCHING S.P.10T. SWITCH**

OPTIONS : /SELF CUT-OFF /AUTO RESET /BCD DECODER /SUPP.DIODES

**R F CHARACTERISTICS**

NUMBER OF WAYS : 10  
 FREQUENCY RANGE : 0 - 18 GHz  
 IMPEDANCE : 50 Ohms

|                 |         |         |         |           |          |
|-----------------|---------|---------|---------|-----------|----------|
| FREQUENCY (GHz) | 0 - 3   | 3 - 8   | 8 -12.4 | 12.4-15.5 | 15.5- 18 |
| V.S.W.R <=      | 1.20    | 1.30    | 1.40    | 1.50      | 1.70     |
| INSERT. LOSS <= | 0.20 dB | 0.30 dB | 0.40 dB | 0.50 dB   | 0.70 dB  |
| ISOLATION >=    | 80 dB   | 70 dB   | 60 dB   | 60 dB     | 55 dB    |
| AVER. POWER (*) | 120 W   | 80 W    | 60 W    | 55 W      | 50 W     |

**ELECTRICAL CHARACTERISTICS**

ACTUATOR : LATCHING  
 NOMINAL CURRENT AT 25° C (±10%) : 500 mA  
 ACTUATOR VOLTAGE (Vcc) : 28V (24 to 30V) / NEGATIVE COMMON  
 TERMINALS : solder pins (250 deg.C max./30 sec.)  
 SELF CUT-OFF TIME : 40 ms < CT < 120 ms  
 BCD INPUTS (E) - High level : 3.5 to 5.5V / 800µA at 5V  
 - Low level : 0 to 1.5V / 20µA at 0.8V

**MECHANICAL CHARACTERISTICS**

CONNECTORS : SMA female per MIL-C 39012  
 LIFE : 2.000.000 cycles per position  
 SWITCHING TIME (nominal voltage;25° C) : < 50 ms  
 CONSTRUCTION : splashproof  
 WEIGHT : < 360 g

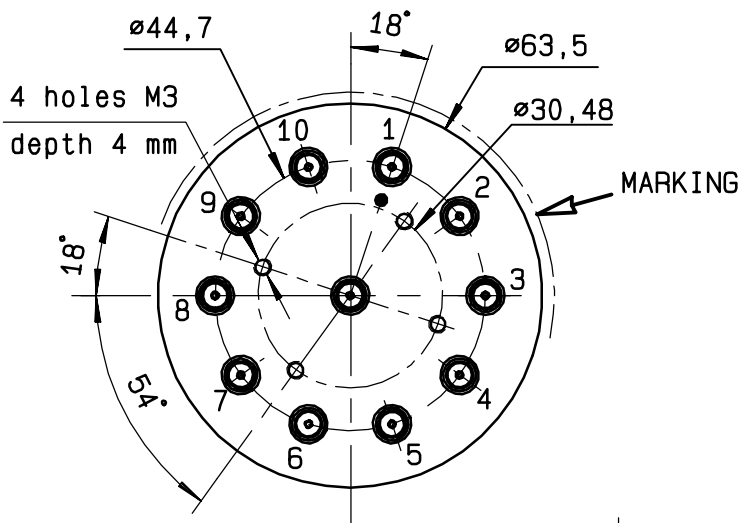
**ENVIRONMENTAL CHARACTERISTICS**

OPERATING TEMPERATURE RANGE (°C) : -40 , +85  
 STORAGE TEMPERATURE RANGE (°C) : -55 , +85

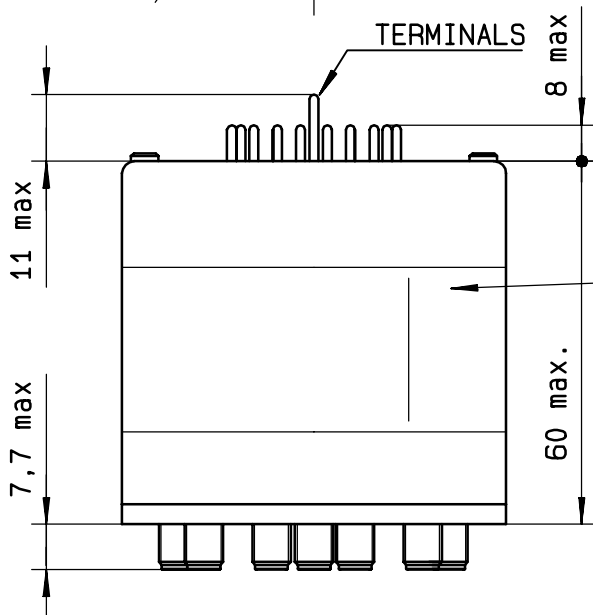
(\* : average power at 25° C per RF path)

This information is given as an indication. In the continual goal to improve our products, we reserve the right to make any modifications judged necessary

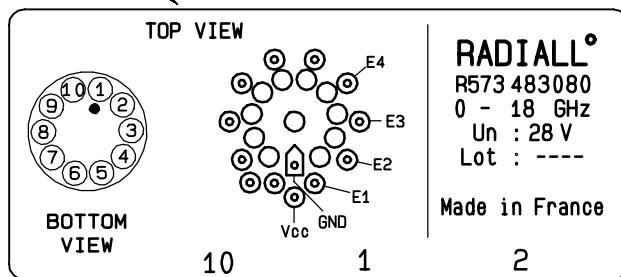
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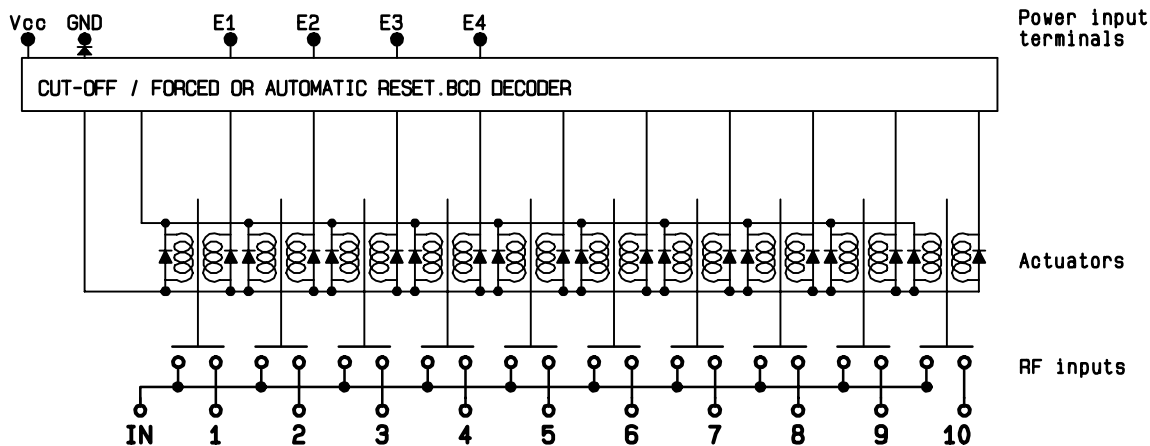
| BCD TRUTH TABLE |    |    |    |                               |
|-----------------|----|----|----|-------------------------------|
| E4              | E3 | E2 | E1 | RF continuity                 |
| 0               | 0  | 0  | 0  | ALL PORTS OPEN (FORCED RESET) |
| 0               | 0  | 0  | 1  | IN ↔ 1                        |
| 0               | 0  | 1  | 0  | IN ↔ 2                        |
| 0               | 0  | 1  | 1  | IN ↔ 3                        |
| 0               | 1  | 0  | 0  | IN ↔ 4                        |
| 0               | 1  | 0  | 1  | IN ↔ 5                        |
| 0               | 1  | 1  | 0  | IN ↔ 6                        |
| 0               | 1  | 1  | 1  | IN ↔ 7                        |
| 1               | 0  | 0  | 0  | IN ↔ 8                        |
| 1               | 0  | 0  | 1  | IN ↔ 9                        |
| 1               | 0  | 1  | 0  | IN ↔ 10                       |



MARKING TOP VIEW (TERMINALS)



**SCHEMATIC DIAGRAM**



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