

## **Technical Data Sheet**

SP12T Terminated Ramses SMA 12.4GHz Latching 12Vdc D-sub connector

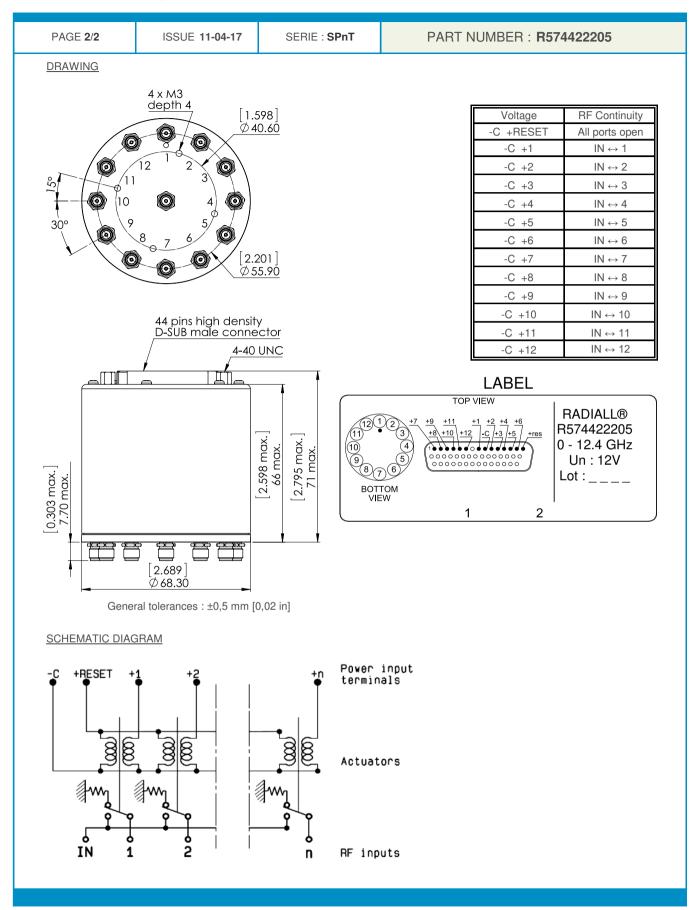
| HP CHARACTERISTICS         Number of ways       ::12         Frequency range       ::0 + 12.4 GHz         Impedance       ::0 0 Dnms         Impedance       ::0 0 dnms         Impedance       ::0 0 ds         imsertion loss max       :0.2 0 ds       0.6 0 ds         issertion loss max       :0.2 0 ds       0.6 0 ds         issertion loss max       :0.2 0 ds       0.6 0 ds         issertion loss max       :0.2 0 ds       0.6 0 ds         issertion loss max       :0.2 0 ds       0.6 0 ds         issertion loss max       :0.2 0 ds       0.6 0 ds         warage power (*)       :0.2 ad w       :1.2 where         warage power (*)       :0.2 dw       :1.2 where         tissertion loss max       :0.2 dw       :1.2 where         tissertion loss max       :0.2 dw       :1.2 where         Actuator       :: 1.2 where       :1.2 where         Marinal current **       :: 2.2 where       :2.2 where         Actuator voltage (Vcc)       :: 1.2 where       :2.2 while oscilla per ML-C 39012         Life connectors       : 2.2 million cycles per position       :2.2 where         Switching Time***       : 4.3 where       :2.2 where         Weight   |   | ISSUE 1  | 1-04-17               | SERIE   | SPnT   | PART NUMBER : <b>R574422205</b> |  |
|---|---|--|-----------------------|---------|--|---------------------------------|--|
| Frequency range       2. 0 1 2.4 GHz         Impedance       50 Ohms         Impedance       0.0 0 0 0 0.40 0 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0  | RF CHARACTER  | STICS  |                       |         |  |                                 |  |
| Frequency range       2. 0 1 2.4 GHz         Impedance       50 Ohms         Impedance       0.0 0 0 0 0.40 0 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0 0.60 0  |   |  |                       |         | 10   |                                 |  |
| Impedance       : 50 Ohms         Impedance       : 50 Ohms         Impedance       : 50 Ohms         Impedance       : 50 Ohms         Impedance       : 0.20 dB 0.40 dB 0.60 dB   | -   |  |                       |         |  |                                 |  |
| Image: A start of the second secon |   | ange   |                       |         |  |                                 |  |
| VSWR max         1,20         1,40         1,50           Insertion loss max         0.20 dB         0.40 dB         0.60 dB           solation min         80 dB         70 dB         60 dB           Average power (*)         240 W         150 W         120 W           TERMINATION IMPEDANCE         ::         50 Ohms           TERM. AVG. POWER AT 25° C         ::         1 W per termination / 3 W total power           ELECTRICAL CHARACTERISTICS         Actuator         ::         120 (10.2 to 13V) / NEGATIVE COMMON           Actuator voltage (Vcc)         ::         12V (10.2 to 13V) / NEGATIVE COMMON           Terminals         ::         2 million cycles per position           Switching Time***         ::         4 pins D-SUB male connector           MECHANICAL CHARACTERISTICS         Connectors         ::         Spleshproof           Weight         ::         :         4 0 g         :           ENVIRONMENTAL CHARACTERISTICS         Construction         ::         :         4 0 g           Environmental competature range         ::         :         15 ms         :           Construction         :         :         :         :         :           Operating temperature range         ::  | Impedance   |  |                       |         | 50 Onins   |                                 |  |
| VSWR max         1,20         1,40         1,60           Insertion loss max         0.20 dB         0.40 dB         0.60 dB           isolation min         80 dB         70 dB         60 dB           werage power (*)         240 W         150 W         120 W           TERMINATION IMPEDANCE         ::         50 Ohms           TERM. AVG. POWER AT 25° C         ::         1 W per termination / 3 W total power   | Frequency   | (GHz)  | DC - 3                | 3 - 8   | 8 - 12.4   |                                 |  |
| bladition min       80 dB       70 dB       60 dB         Average power (*)       240 W       150 W       120 W         TERMINATION IMPEDANCE       :: 50 Ohms         TERM. AVG. POWER AT 25° C       :: 1 W per termination / 3 W total power         ELECTRICAL CHARACTERISTICS         Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 1 2V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 24 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       :: SMA female per MIL-C 39012         Life       :: 2 million cycles per position         Switching Time***       :: 4 15 ms         Construction       : Splashproof         Weight       : < 400 g   |   | 1  |                       |         |  |                                 |  |
| Average power (*)       240 W       150 W       120 W         TERMINATION IMPEDANCE       :: 50 Ohms         TERM. AVG. POWER AT 25° C       :: 1 W per termination / 3 W total power         ELECTRICAL CHARACTERISTICS         Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       :: SMA female per MIL-C 39012         Life       :: 2 million cycles per position         Switching Time***       :: < 15 ms  | Insertion los   | ss max   | 0.20 dB               | 0.40 dB | 0.60 dB  |                                 |  |
| TERMINATION IMPEDANCE       :: 50 Ohms         TERM. AVG. POWER AT 25° C       :: 1 W per termination / 3 W total power         ELECTRICAL CHARACTERISTICS         Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET :: 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: SMA female per MIL-C 39012         Life       :: 2 million cycles per position         Switching Time***       :: < 15 ms  |   |  | 80 dB                 |         | 60 dB  |                                 |  |
| TERM. AVG. POWER AT 25° C       : 1 W per termination / 3 W total power         ELECTRICAL CHARACTERISTICS         Actuator       : LATCHING         Nominal current **       : 320 mA / RESET : 3840 mA ****         Actuator voltage (Voc)       : 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       : 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms   | Average po  | wer (*)  | 240 W                 | 150 W   | 120 W  |                                 |  |
| TERM. AVG. POWER AT 25° C       : 1 W per termination / 3 W total power         ELECTRICAL CHARACTERISTICS         Actuator       : LATCHING         Nominal current **       : 320 mA / RESET : 3840 mA ****         Actuator voltage (Voc)       : 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       : 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms   |   |  |                       |         | 50 Ohma  |                                 |  |
| ELECTRICAL CHARACTERISTICS         Actuator       :: LATCHING         Mominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         MCOnnectors       :: SMA female per MIL-C 39012         Life       :: 2 million cycles per position         Switching Time***       : < 15 ms  |   |  |                       |         |  | ningtion / 2 W total news       |  |
| Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 2 million cycles per position         Switching Time***       :: 415 ms         Construction       :: Splashproof         Weight       :: < 400 g   | IERM. AVC   | a. POWER AI  | 25° U                 | :       | i w per teri                                     | nination / 3 w total power      |  |
| Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 2 million cycles per position         Switching Time***       :: 415 ms         Construction       :: Splashproof         Weight       :: < 400 g   |   |  |                       |         |  |                                 |  |
| Actuator       :: LATCHING         Nominal current **       :: 320 mA / RESET : 3840 mA ****         Actuator voltage (Vcc)       :: 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS       :: 2 million cycles per position         Switching Time***       :: 415 ms         Construction       :: Splashproof         Weight       :: < 400 g   | ELECTRICAL CH   |  | CS                    |         |  |                                 |  |
| Nominal current **       ::::::::::::::::::::::::::::::::::::   |   |  | <u></u>               |         |  |                                 |  |
| Actuator voltage (Vcc)       : 12V (10.2 to 13V) / NEGATIVE COMMON         Terminals       : 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms   | Actuator  |  |                       | :       | LATCHING   |                                 |  |
| Terminals       : 44 pins D-SUB male connector         MECHANICAL CHARACTERISTICS         Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms  | Nominal cu  | rrent **   |                       |         |  |                                 |  |
| MECHANICAL CHARACTERISTICS         Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms   | Actuator vo   | Itage (Vcc)  |                       | :       | 12V (10.2 to                                     | 13V) / NEGATIVE COMMON          |  |
| Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms  | Terminals   |  |                       | :       | 44 pins D-S                                      | UB male connector               |  |
| Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms         Construction       : Splashproof         Weight       : < 400 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)       : -55°C to +85°C         (* Average power at 25°C per RF Path)       : -40°C to +85°C         (* Nominal voltage ; 25°C)       : -55°C to +85°C  |   |  |                       |         |  |                                 |  |
| Connectors       : SMA female per MIL-C 39012         Life       : 2 million cycles per position         Switching Time***       : < 15 ms         Construction       : Splashproof         Weight       : < 400 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)       : -55°C to +85°C         (* Average power at 25°C per RF Path)       : -40°C to +85°C         (* Nominal voltage ; 25°C)       : -55°C to +85°C  |   |  |                       |         |  |                                 |  |
| Life       : 2 million cycles per position         Switching Time***       : < 15 ms  | MECHANICAL CH   | IARACTERIST  | ICS                   |         |  |                                 |  |
| Life       : 2 million cycles per position         Switching Time***       : < 15 ms  |   |  |                       |         |  |                                 |  |
| Switching Time***       : < 15 ms   |   |  |                       |         |  |                                 |  |
| Construction       : Splashproof         Weight       : < 400 g   | Connectors  |  |                       |         |  |                                 |  |
| Weight : < 400 g<br>ENVIRONMENTAL CHARACTERISTICS<br>Operating temperature range : -40°C to +85°C<br>Storage temperature range : -55°C to +85°C<br>(* Average power at 25°C per RF Path)<br>(* At 25° C ±10%)<br>(** Nominal voltage ; 25° C)   | Connectors<br>Life  |  |                       | :       | 2 million cy                                     |                                 |  |
| 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)   | Connectors<br>Life<br>Switching T   | ime***   |                       | :       | 2 million cy<br>< 15 ms                          | cles per position               |  |
| 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)   | Connectors<br>Life<br>Switching T<br>Constructio  | ime***   |                       | :       | 2 million cy<br>< 15 ms<br>Splashproo            | cles per position               |  |
| 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)   | Connectors<br>Life<br>Switching T<br>Constructio  | ime***   |                       | :       | 2 million cy<br>< 15 ms<br>Splashproo            | cles per position               |  |
| Storage temperature range : -55°C to +85°C (* Average power at 25°C per RF Path) (** At 25° C ±10%) (*** Nominal voltage ; 25° C)   | Connectors<br>Life<br>Switching T<br>Constructio  | ime***   |                       | :       | 2 million cy<br>< 15 ms<br>Splashproo            | cles per position               |  |
| Storage temperature range : -55°C to +85°C (* Average power at 25°C per RF Path) (** At 25° C ±10%) (*** Nominal voltage ; 25° C)   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight  | ime***<br>n  | RISTICS               | :       | 2 million cy<br>< 15 ms<br>Splashproo            | cles per position               |  |
| (* Average power at 25°C per RF Path)<br>(** At 25° C ±10%)<br>(*** Nominal voltage ; 25° C)  | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA  | ime***<br>n<br>L CHARACTE!   |                       | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f          |  |
| <ul> <li>(* Average power at 25°C per RF Path)</li> <li>(** At 25° C ±10%)</li> <li>(*** Nominal voltage ; 25° C)</li> </ul>  | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br><u>ENVIRONMENTA</u><br>Operating te   | ime***<br>n<br><u>L CHARACTEF</u><br>emperature ran  | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
| (**         At 25° C ±10%)           (***         Nominal voltage ; 25° C)  | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br><u>ENVIRONMENTA</u><br>Operating te   | ime***<br>n<br><u>L CHARACTEF</u><br>emperature ran  | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
| (**         At 25° C ±10%)           (***         Nominal voltage ; 25° C)  | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br><u>ENVIRONMENTA</u><br>Operating te   | ime***<br>n<br><u>L CHARACTEF</u><br>emperature ran  | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
| (*** Nominal voltage ; 25° C)   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br><u>ENVIRONMENTA</u><br>Operating te<br>Storage ten  | ime***<br>n<br><u>L CHARACTER</u><br>emperature ran<br>aperature range   | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten   | ime***<br>n<br><u>L CHARACTE</u><br>emperature range<br>aperature range<br>wer at 25°C pe                      | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1                     | ime***<br>n<br><u>L CHARACTER</u><br>emperature ran<br>aperature range<br>wer at 25°C pe<br>0%)                | ge                    | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1<br>(*** Nominal vol | ime***<br>n<br><u>L CHARACTE</u><br>emperature ran<br>perature range<br>wer at 25°C pe<br>0%)<br>tage ; 25° C) | ge<br>•<br>r RF Path) | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1<br>(*** Nominal vol | ime***<br>n<br><u>L CHARACTE</u><br>emperature ran<br>perature range<br>wer at 25°C pe<br>0%)<br>tage ; 25° C) | ge<br>•<br>r RF Path) | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1<br>(*** Nominal vol | ime***<br>n<br><u>L CHARACTE</u><br>emperature ran<br>perature range<br>wer at 25°C pe<br>0%)<br>tage ; 25° C) | ge<br>•<br>r RF Path) | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1<br>(*** Nominal vol | ime***<br>n<br><u>L CHARACTE</u><br>emperature ran<br>perature range<br>wer at 25°C pe<br>0%)<br>tage ; 25° C) | ge<br>•<br>r RF Path) | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>;°C   |  |
|   | Connectors<br>Life<br>Switching T<br>Constructio<br>Weight<br>ENVIRONMENTA<br>Operating te<br>Storage ten<br>(* Average po<br>(** At 25° C ±1<br>(*** Nominal vol | ime***<br>n<br><u>L CHARACTE</u><br>emperature ran<br>perature range<br>wer at 25°C pe<br>0%)<br>tage ; 25° C) | ge<br>•<br>r RF Path) | :       | 2 million cy<br>< 15 ms<br>Splashproo<br>< 400 g | cles per position<br>f<br>5°C   |  |

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## **Technical Data Sheet**

SP12T Terminated Ramses SMA 12.4GHz Latching 12Vdc D-sub connector

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