



Moebius

## CHARACTERISTICS

| TEST / CHARACTERISTICS      | VALUES / REMARKS                                                                    |                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                             | Not Mated                                                                           | Mated                                                                               |
| Operating Temperature Range | -40 °C to + 110 °C                                                                  |                                                                                     |
| Rated Power                 | 10 W / 900 MHz                                                                      |                                                                                     |
| DC Current Withstanding     | 1 A max                                                                             |                                                                                     |
| Frequency Range             | DC to 6 GHz                                                                         |                                                                                     |
| V.S.W.R.                    | 1.20 max DC to 3 GHz<br>1.50 max 3 to 6 GHz                                         | 1.15 max DC to 3 GHz<br>1.25 max 3 GHz to 6 GHz                                     |
| Insertion Loss              | 0.15 dB max DC to 2 GHz<br>0.20 dB max 2 GHz to 3 GHz<br>0.40 dB max 3 GHz to 6 GHz | 0.10 dB max DC to 2 GHz<br>0.15 dB max 2 GHz to 3 GHz<br>0.20 dB max 3 GHz to 6 GHz |
| Isolation Loss              | -<br>-<br>-                                                                         | 35 dB minDC to 1 GHz<br>25 dB min 1 GHz to 3 GHz<br>25 dB min 3 GHz to 6 GHz        |

| Item                                                                           | Specification                                                                         | Conditions                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact Resistance                                                             | 200 mΩ max                                                                            | 100 mA                                                                                                                                                                                                                      |
| Insulation Resistance                                                          | 3000 MΩ min                                                                           | 250 V DC                                                                                                                                                                                                                    |
| Withstanding Voltage                                                           | No Flashover or Insulation Breakdown                                                  | 250 V rms                                                                                                                                                                                                                   |
| Vibration                                                                      | No Discontinuities<br>> 1μs under 100mA                                               | Sinus: 5-500Hz / Displacement 0.75 Peak /<br>Acceleration 10 g Duration 2h in each Direction<br>Random: 5-1000Hz / Displacement 0.75 Peak /<br>Acceleration 3.3 g Duration 1h in each Direction<br>25 dB min 3 GHz to 6 GHz |
| Shock                                                                          | No Discontinuities<br>> 1μs under 100mA                                               | Acceleration 50 g / Duration Pulse 11 ms /<br>Waveform Pulse Half Sinus / Number<br>of Shocks 3 per Direction                                                                                                               |
| Free Fall                                                                      | Center Contact Resistance<br>RF Measurements No Discontinuities<br>> 1 ms under 100mA | NFC 20732 Method 1 Test Area Concrete / Fall<br>Height 1 m / Duration 2*2 falls                                                                                                                                             |
| Temperature Life                                                               | Center Contact Resistance<br>RF Measurements                                          | T + 90 °C / Duration 1000 h / 40% HR                                                                                                                                                                                        |
| Thermal Shock                                                                  | Center Contact Resistance<br>RF Measurements                                          | T - 40 °C to + 90°C Exposure 15mn /<br>Transfer Time < 10 s / 100 Cycles                                                                                                                                                    |
| Damp Heat                                                                      | Center Contact Resistance<br>RF Measurements                                          | 40 °C / 93% / 21 days                                                                                                                                                                                                       |
| Retention Force<br>• Insertion Force - Mating<br>• Extraction Force - Unmating | 9N<br>12N                                                                             | Initial                                                                                                                                                                                                                     |
| Durability                                                                     | Mating – Unmating Force<br>Center Contact Resistance<br>RF Measurements               | 25,000 Cycles                                                                                                                                                                                                               |

## MATERIALS AND PLATING

|                | Material         | Plating |
|----------------|------------------|---------|
| Body           | Brass            | NPGR    |
| Center Contact |                  |         |
| Outer Contact  |                  |         |
| Insulator      | PTFE / NC        |         |
| Other Parts    | Beryllium Copper | NPGR    |