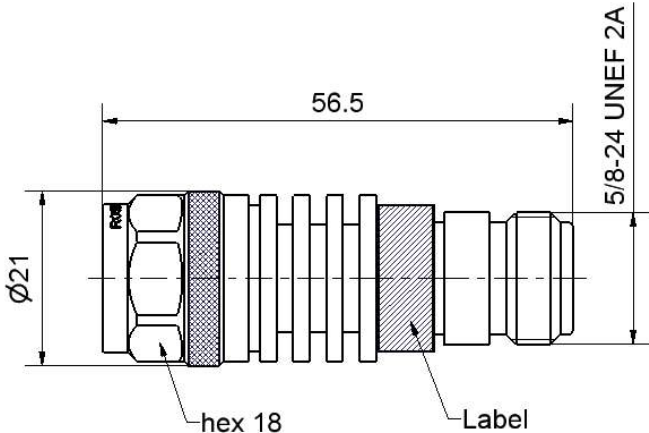


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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                                                                                                                       |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------|-----------------|----------------|-----------------------|-------|---------------------------------|-----------------------|------|---------------------------------|---------------|-------|------------------------------------------------|--------------|-------|------------------------------------------------|------------|------|--|-----------|-----|--|
| Technical Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         | Rosenberger                                                                                                           |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| N 50 Ω                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Attenuator<br>Plug/Jack | 53AS105-K06N3                                                                                                         |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| <div></div> <p>All dimensions are in mm; tolerances according to ISO 2768 m-H</p> <div><div>Interface</div><div>According to</div><div>IEC 60169-16, MIL-PRF-39012, CECC 22210</div></div> <div><div>Documents</div><div>N/A</div></div> <div><div>Material and plating</div><table><tr><td><b>Connector parts</b></td><td><b>Material</b></td><td><b>Plating</b></td></tr><tr><td>Center contact - plug</td><td>Brass</td><td>Gold, min. 1.27 µm, over nickel</td></tr><tr><td>Center contact - jack</td><td>CuBe</td><td>Gold, min. 1.27 µm, over nickel</td></tr><tr><td>Outer contact</td><td>Brass</td><td>Flash white bronze over silver(e.g. Optargen®)</td></tr><tr><td>Coupling nut</td><td>Brass</td><td>Flash white bronze over silver(e.g. Optargen®)</td></tr><tr><td>Dielectric</td><td>PTFE</td><td></td></tr><tr><td>Substrate</td><td>ALN</td><td></td></tr></table></div> |                         |                                                                                                                       | <b>Connector parts</b> | <b>Material</b> | <b>Plating</b> | Center contact - plug | Brass | Gold, min. 1.27 µm, over nickel | Center contact - jack | CuBe | Gold, min. 1.27 µm, over nickel | Outer contact | Brass | Flash white bronze over silver(e.g. Optargen®) | Coupling nut | Brass | Flash white bronze over silver(e.g. Optargen®) | Dielectric | PTFE |  | Substrate | ALN |  |
| <b>Connector parts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Material</b>         | <b>Plating</b>                                                                                                        |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Center contact - plug                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Brass                   | Gold, min. 1.27 µm, over nickel                                                                                       |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Center contact - jack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CuBe                    | Gold, min. 1.27 µm, over nickel                                                                                       |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Outer contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Brass                   | Flash white bronze over silver(e.g. Optargen®)                                                                        |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Coupling nut                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Brass                   | Flash white bronze over silver(e.g. Optargen®)                                                                        |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Dielectric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PTFE                    |                                                                                                                       |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Substrate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ALN                     |                                                                                                                       |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.de">www.rosenberger.de</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         | Tel. : +49 8684 18-0<br>Fax : +49 8684 18-499<br>Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         | Page<br>1 / 2                                                                                                         |                        |                 |                |                       |       |                                 |                       |      |                                 |               |       |                                                |              |       |                                                |            |      |  |           |     |  |

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| Technical Data Sheet                                                                                                                                                                                                                                                                                                                         |          |                                |          | Rosenberger                                                                                                           |                           |                  |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------|---------------------------|------------------|-------------------|
| N 50 Ω                                                                                                                                                                                                                                                                                                                                       |          | Attenuator<br>Plug/Jack        |          | 53AS105-K06N3                                                                                                         |                           |                  |                   |
| <b>Electrical data</b>                                                                                                                                                                                                                                                                                                                       |          |                                |          |                                                                                                                       |                           |                  |                   |
| Impedance                                                                                                                                                                                                                                                                                                                                    |          | 50 Ω                           |          |                                                                                                                       |                           |                  |                   |
| Frequency                                                                                                                                                                                                                                                                                                                                    |          | DC to 10 GHz                   |          |                                                                                                                       |                           |                  |                   |
| Return loss                                                                                                                                                                                                                                                                                                                                  |          | ≥ 26.4 dB, DC to 2 GHz         |          |                                                                                                                       |                           |                  |                   |
|                                                                                                                                                                                                                                                                                                                                              |          | ≥ 21.2 dB, 2 GHz to 5 GHz      |          |                                                                                                                       |                           |                  |                   |
|                                                                                                                                                                                                                                                                                                                                              |          | ≥ 14.0 dB, 5 GHz to 10 GHz     |          |                                                                                                                       |                           |                  |                   |
| Attenuation                                                                                                                                                                                                                                                                                                                                  |          | 6 dB ± 0.5 dB, DC to 4 GHz     |          |                                                                                                                       |                           |                  |                   |
|                                                                                                                                                                                                                                                                                                                                              |          | 6 dB ± 1.0 dB, 4 GHz to 10 GHz |          |                                                                                                                       |                           |                  |                   |
| Center contact resistance                                                                                                                                                                                                                                                                                                                    |          | ≤ 1 mΩ                         |          |                                                                                                                       |                           |                  |                   |
| Outer contact resistance                                                                                                                                                                                                                                                                                                                     |          | ≤ 0.25 mΩ                      |          |                                                                                                                       |                           |                  |                   |
| Power handling                                                                                                                                                                                                                                                                                                                               |          | ≤ 5 W at 25°C                  |          |                                                                                                                       |                           |                  |                   |
| <b>Mechanical data</b>                                                                                                                                                                                                                                                                                                                       |          |                                |          |                                                                                                                       |                           |                  |                   |
| Mating cycles                                                                                                                                                                                                                                                                                                                                |          | ≥ 500                          |          |                                                                                                                       |                           |                  |                   |
| Coupling nut retention                                                                                                                                                                                                                                                                                                                       |          | ≥ 450 N                        |          |                                                                                                                       |                           |                  |                   |
| Center contact captivation:                                                                                                                                                                                                                                                                                                                  |          | ≥ 28 N                         |          |                                                                                                                       |                           |                  |                   |
| Maximum torque                                                                                                                                                                                                                                                                                                                               |          | 1.70 Nm                        |          |                                                                                                                       |                           |                  |                   |
| Recommended torque                                                                                                                                                                                                                                                                                                                           |          | 0.70 Nm to 1.10 Nm             |          |                                                                                                                       |                           |                  |                   |
| <b>Environmental data</b>                                                                                                                                                                                                                                                                                                                    |          |                                |          |                                                                                                                       |                           |                  |                   |
| Temperature range                                                                                                                                                                                                                                                                                                                            |          | -65°C to +125°C                |          |                                                                                                                       |                           |                  |                   |
| RoHS                                                                                                                                                                                                                                                                                                                                         |          | compliant                      |          |                                                                                                                       |                           |                  |                   |
| <b>Packing</b>                                                                                                                                                                                                                                                                                                                               |          |                                |          |                                                                                                                       |                           |                  |                   |
| Standard                                                                                                                                                                                                                                                                                                                                     |          | 1 pce in bag                   |          |                                                                                                                       |                           |                  |                   |
| Weight                                                                                                                                                                                                                                                                                                                                       |          | 73 g/pce                       |          |                                                                                                                       |                           |                  |                   |
| While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary. |          |                                |          |                                                                                                                       |                           |                  |                   |
| Draft                                                                                                                                                                                                                                                                                                                                        | Date     | Approved                       | Date     | Rev.                                                                                                                  | Engineering change number | Name             | Date              |
| Kerstin Herzog                                                                                                                                                                                                                                                                                                                               | 05/08/05 | Lars Ramtke                    | 16/08/13 | b00                                                                                                                   | 12-0878                   | Marion Striegler | 16/08/13          |
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