# GT-24-112

## NanoRF Contacts

## VITA 67.3 for Backplane

## Glenair Contacts 852-309 and 852-310

## For Cable 962-025-047

## RF Signal Integrity Report

## Revision History

| Rev | Date | Issued | Approved | Description |
|---|---|---|---|---|
| 1 | 6/12/2024 | L. Blackwell, W, Lewis | G. Hunziker | Initial Release |
| 2 | 6/5/2025 | L. Blackwell | G. Hunziker | Update formatting |
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## 1. Introduction

This document contains results from testing that was performed to evaluate the high-frequency electrical performance of the Glenair NanoRF contacts. This report outlines the frequency domain performances of Insertion Loss (IL), and Voltage Standing Wave Ratio (VSWR).

## 2. Test Information

The test samples consisted of the direct attach pin 852-309 and socket 852-310 contacts assembled to six inches of Glenair 962-025-047 cable with 2.92 mm connectors for test equipment. A mated sample is shown in Figure 1.

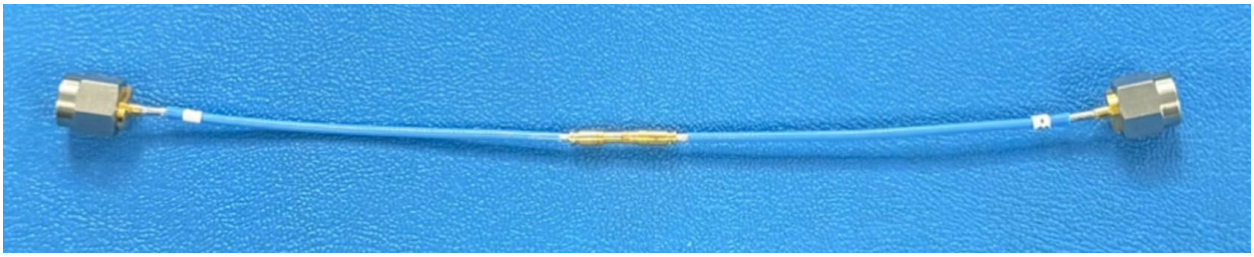

Figure 1. Mated Sample

Measurements were taken using a Keysight N5227B PNA network analyzer. A mechanical fixture was used to compress the contact mating for testing (See Figure 2). No electrical test fixturing was required as the test samples are directly connected to the test equipment. A 2x-thru measurement was made to remove the lead in coax effects. The test data was saved in a touchstone (.s2p) format.

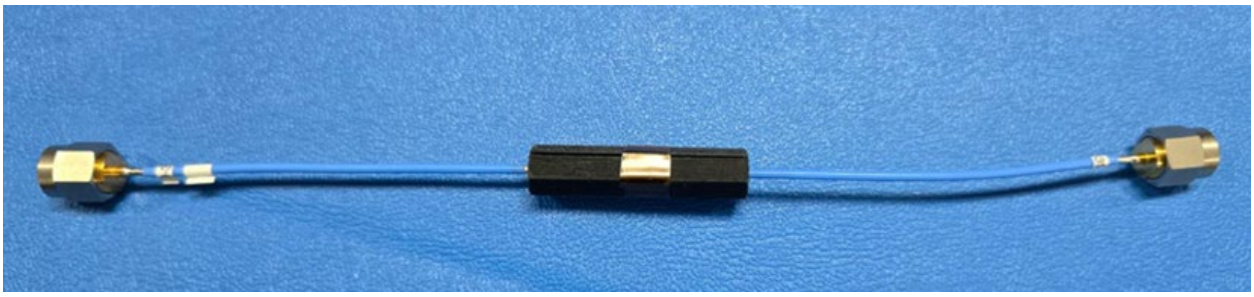

Figure 2. Mated Sample with Mechanical Test Fixture

# 3. Test Results

Figure 3 below depicts the insertion loss results while Figure 4 depicts the VSWR results.

## 3.1.Contact Insertion Loss

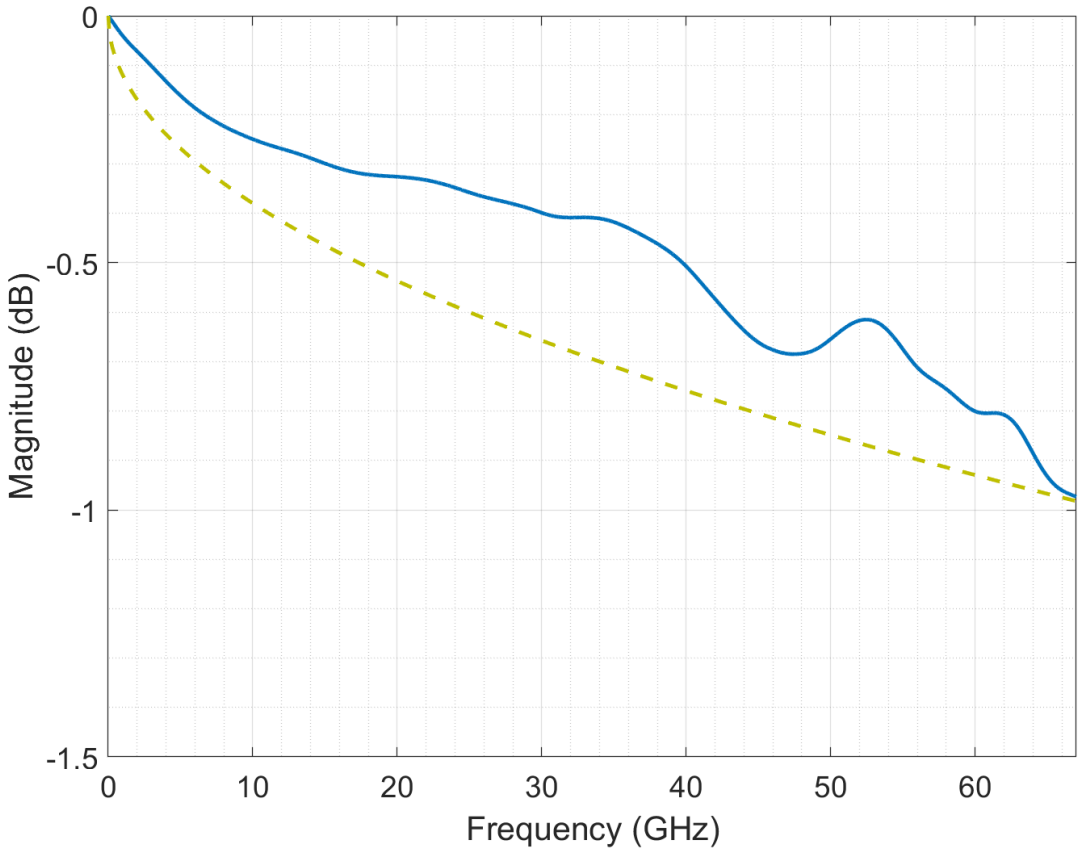


Figure 3. Insertion Loss Results

## 3.2.Contact VSWR

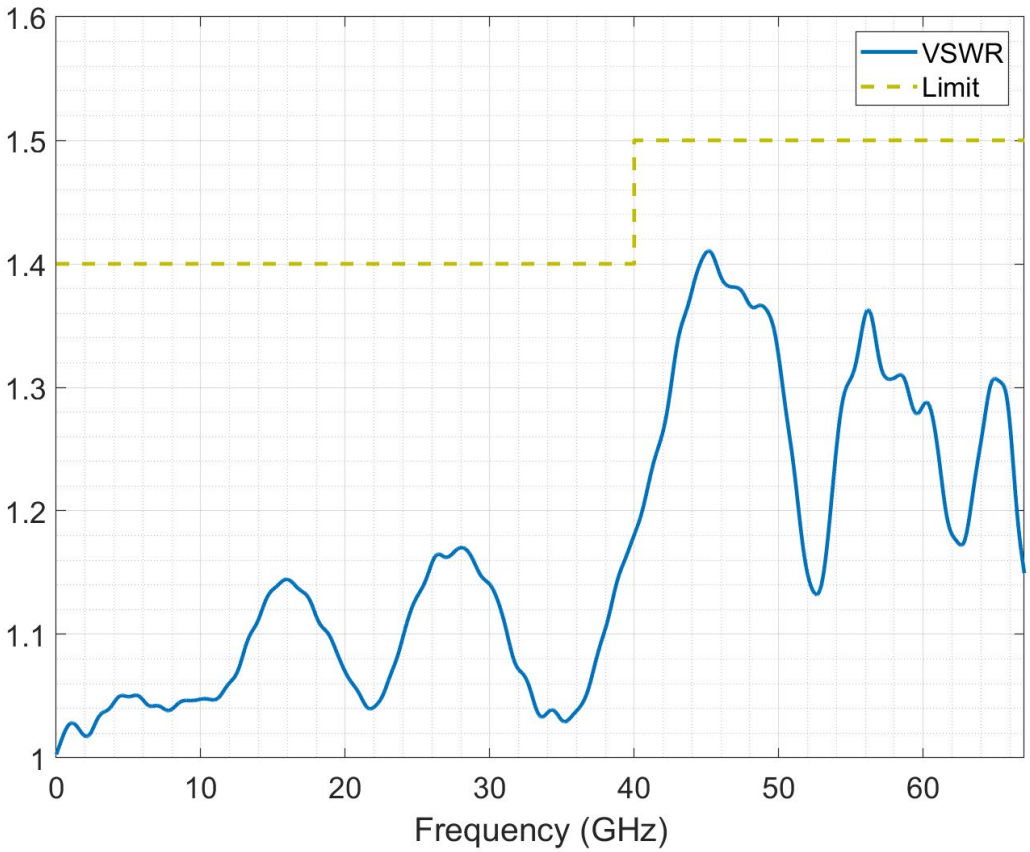


Figure 4. VSWR Results