



ACP PCB Stripline Connector for the 047 Semi-Rigid Cable

Technical Data Sheet

ACP-047-J-PCB Stripline

Description

The ACP Connector assembly is designed for use with the 047 Semi-Rigid Cable. This solderless, compression fit connector is reusable and field replaceable. Operating at a maximum frequency of 110 GHz, the ACP connector sets a new standard in performance, longevity and value in the coaxial connector industry.

Features

Max. Operating Frequency 110 GHz
 Insertion Loss (s21) < 1dB to 98 GHz
 Return Loss (s11) > -15 dB to 85 GHz
 >100,000 Mating Cycle Life
 Small Footprint (Ø9.91mm x 4.57mm)

Configuration

047 Semi-Rigid Cable
 50 Ohms
 2 Hole PCB Mount
 Solderless, Compression Contact
 Field Replaceable

Applications

General Purpose Test
 PCB Applications
 Signal Integrity Measurements

Chip Evaluation
 Test Fixtures
 Transmissions Systems

Performance by Frequency Band

| Frequency (GHz) | Return Loss, Max. (dB) | VSWR, Max. | Insertion Loss, Max. (dB) |
|-----------------|------------------------|------------|---------------------------|
| DC to 18 | -29.50 | 1.06:1 | 0.052 |
| 18 to 27 | -26.01 | 1.10:1 | 0.082 |
| 27 to 40 | -22.83 | 1.11:1 | 0.067 |
| 40 to 50 | -20.94 | 1.19:1 | 0.098 |
| 50 to 67 | -18.65 | 1.26:1 | 0.161 |
| 67 to 85 | -15.22 | 1.41:1 | 0.408 |
| 85 to 99 | -11.23 | 1.83:1 | 0.946 |

Mechanical Specifications

| | |
|---------------------------------|----------|
| Size (Full Assembly): | |
| Length (MM) | 9.91 |
| Width (MM) | 4.57 |
| Height (MM) | 4.95 |
| Weight (G) | 0.49 |
| Mounting Screw Spacing (MM) | 7.16 |
| Mounting Screw Type | #0-80 |
| Mating Cycles (Interposer Only) | >100,000 |

Material Specifications

Component Description

Interposer
 Connector Assembly

Construction Material

Copper
 Brass

Surface Finish

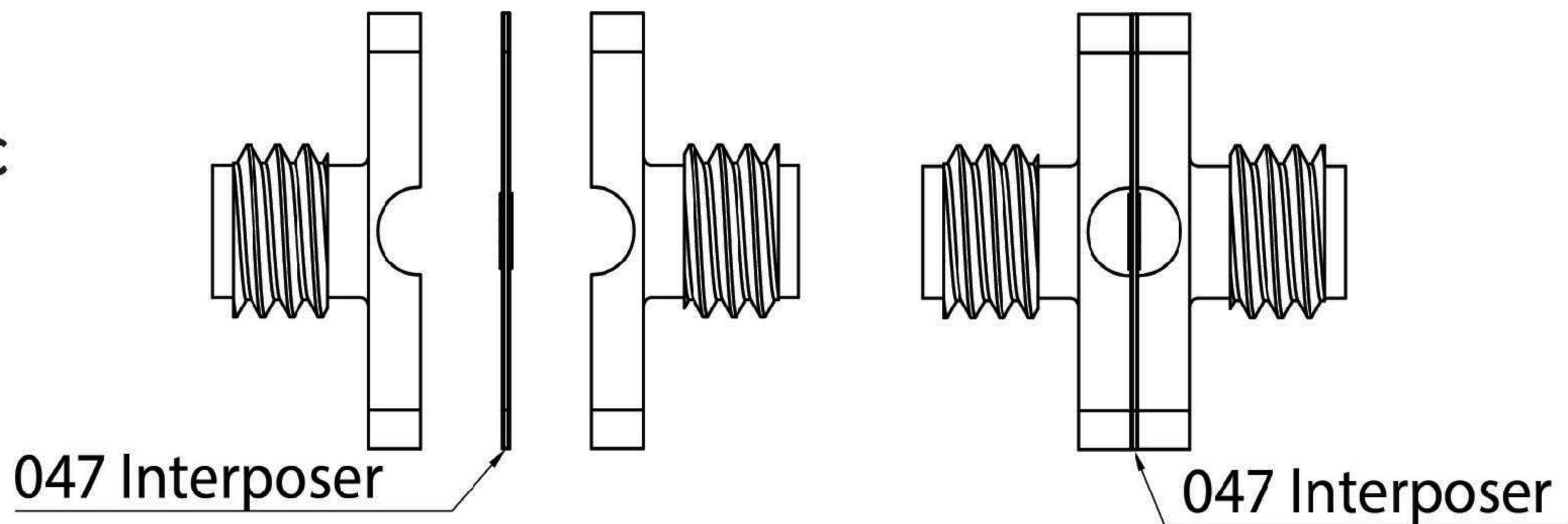
Nickel
 ENIG

Environmental Specifications

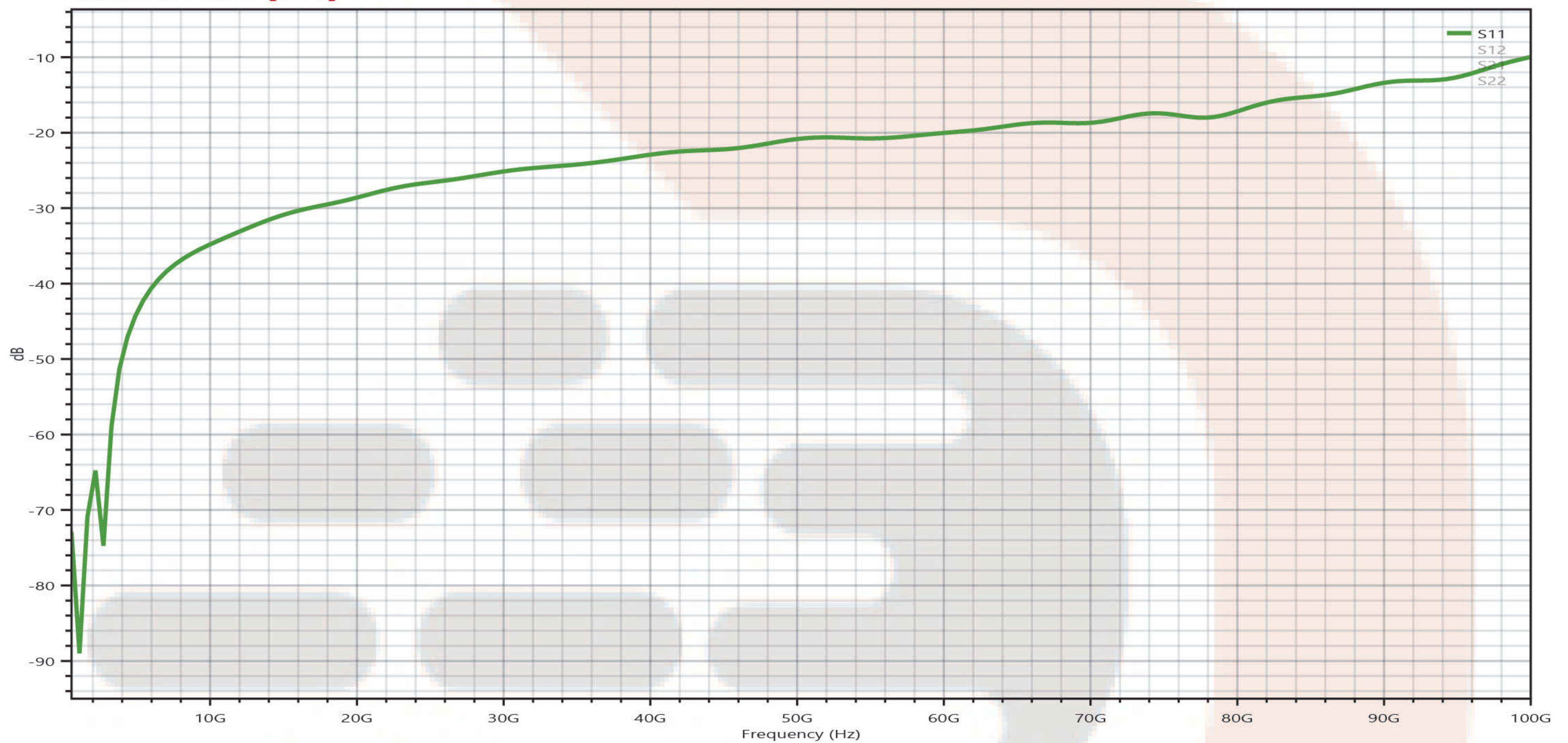
-55 to 140 °C (Continuous Operating Temperature)

**Typical Back-to-Back
Test Data to 100 GHz**

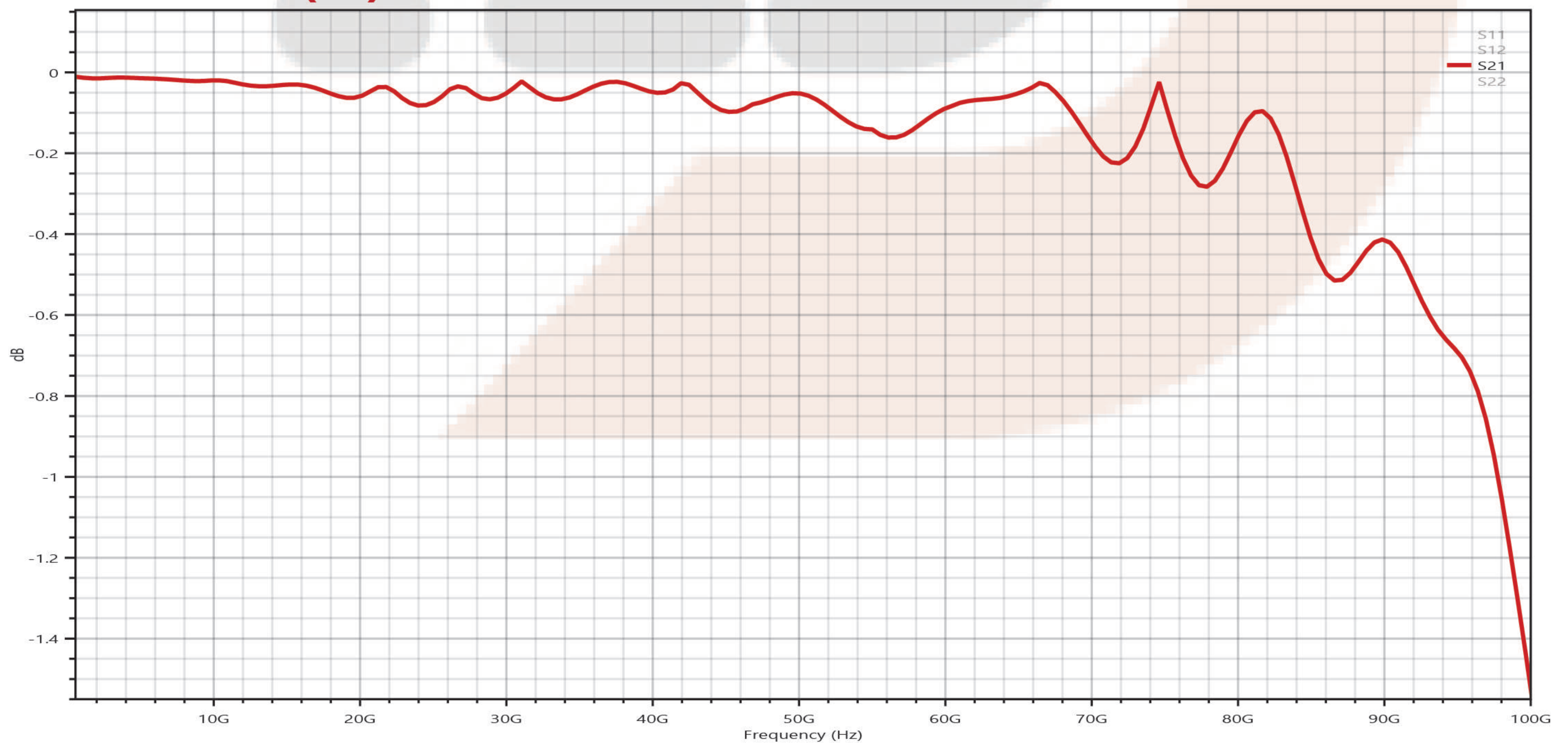
*3rd party Cycling, DC Current Capacity and RF Characterization reports (including s2p files) are available upon request

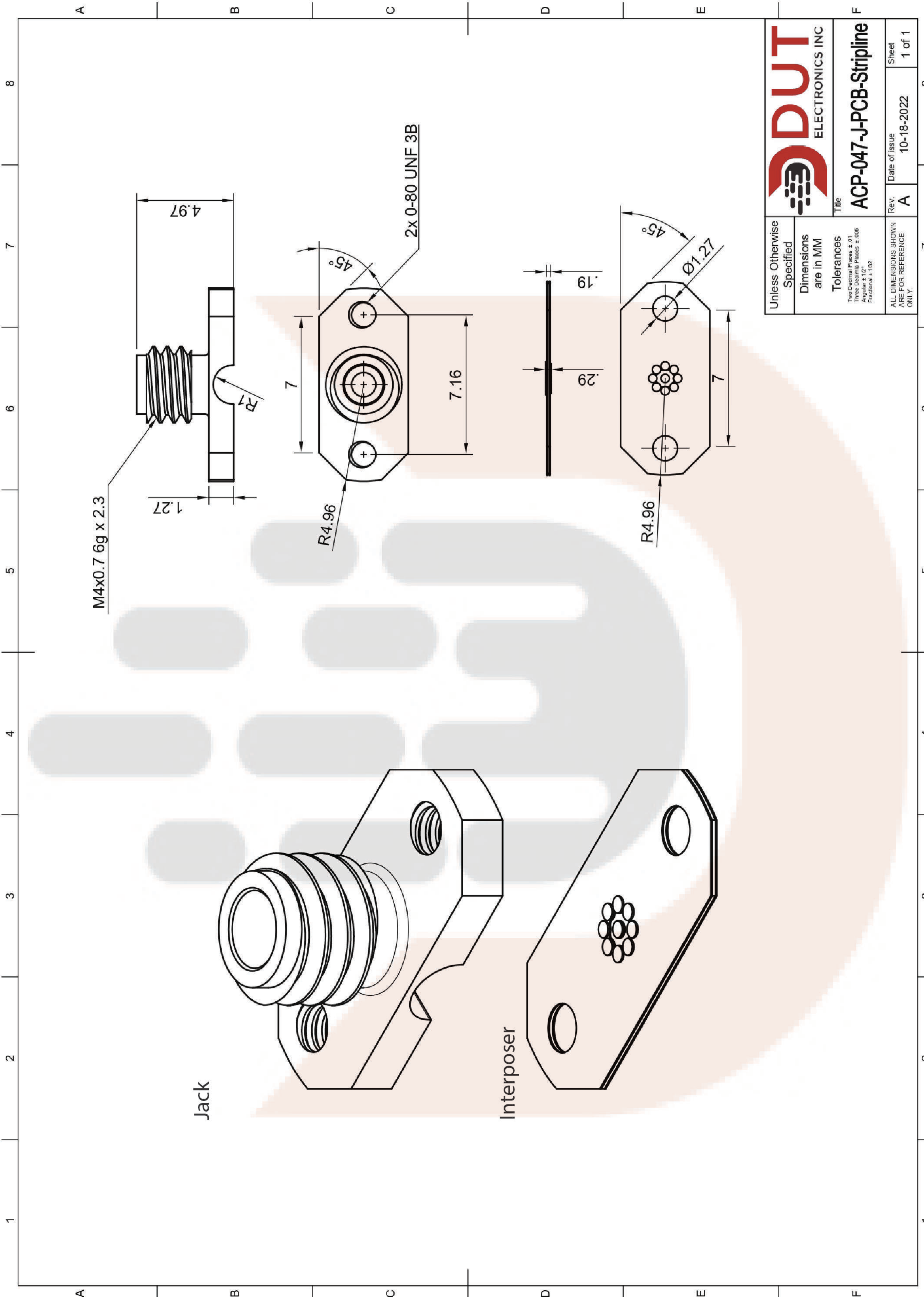


Return Loss (s11)



Insertion Loss (s21)





Jack

Interposer

M4x0.7 6g x 2.3

2x 0-80 UNF 3B



Title
ACP-047-J-PCB-Stripline

Unless Otherwise Specified
Dimensions are in MM
Tolerances
Two Decimal Places ± .01
Three Decimal Places ± .005
Angular ± 1.2°
Fractional ± 1/32

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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