TAOGLAS

Datasheet

# CAB.058

**Description:**

SMA(F) Jack Straight to Strip/Tin 3/3mm with 50mm 0.047” semi-rigid cable

**Features:**

Semi-Rigid Cable Assembly

SMA(F)ST connector

Strip/Tin 3/3mm

50mm 0.047” semi-rigid cable

RoHS & Reach Compliant

| | | |
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IATF16949

# 1. Introduction

The Taoglas CAB.058 is a 0.047” semi-rigid coax pigtail with SMA connector that is ideal for RF circuit debug and design verification. The pigtail is 50mm long and comes stripped and tinned to expose a short length of the inner conductor, thus removing the need to make your own. The CAB.058 acts as a 50 ohm transmission line to connect your test equipment to your printed circuit board and has a SMA female connector making it the proper mate for most coax cables used in design labs, eliminating the need for additional adapters. Semi-rigid coax also has the best attenuation of all micro-coax types.

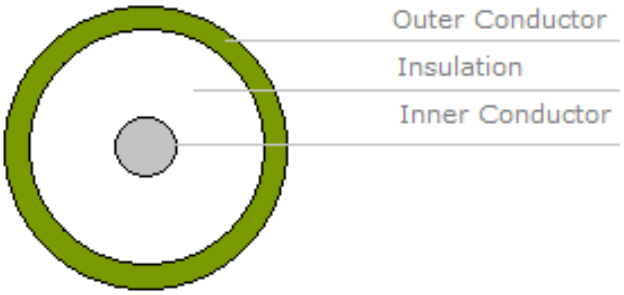
In order to make a proper connection to the PCB without causing an impedance mismatch, the cable jacket needs to be soldered to the PCB ground and the inner conductor gets soldered to the RF transmission line. The CAB.058 has a smooth, semi-rigid, metallic jacket that makes it very easy to solder the jacket to the PCB ground.

The thinner 0.047” cable diameter makes it easier to solder onto densely populated circuit boards. The semi-rigid nature of the cable also allows you to easily bend the pigtail to your convenience, yet holds its position to prevent toppling over and shorting nearby components.

Taoglas provides customized length and connector variants subject to MOQ. Contact your regional Taoglas customer support team for further details.

# 2. Cable Specifications – 0.047” Semi Rigid

## 2.1 Cross Section




## 2.2 Structure

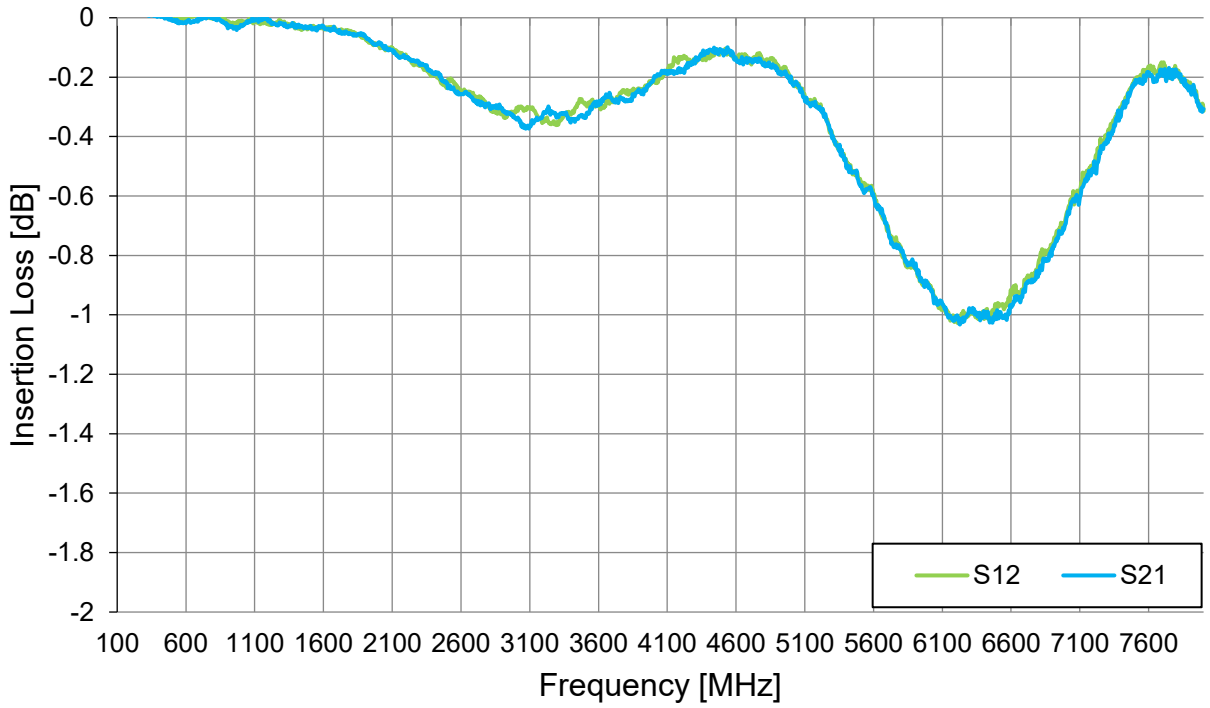
| Inner Conductor | Insulation | Outer Conductor |
|---|---|---|
| Material | Material | Material |
| SPCW | PTFE, F1 | Copper/Tin |
| Diameter | Dielectric O.D | Diameter |
| 0.0113+/-.0005 inches | .037+/-.001 inches | .047+/-.001 inches |

## 2.3 Cable Specification

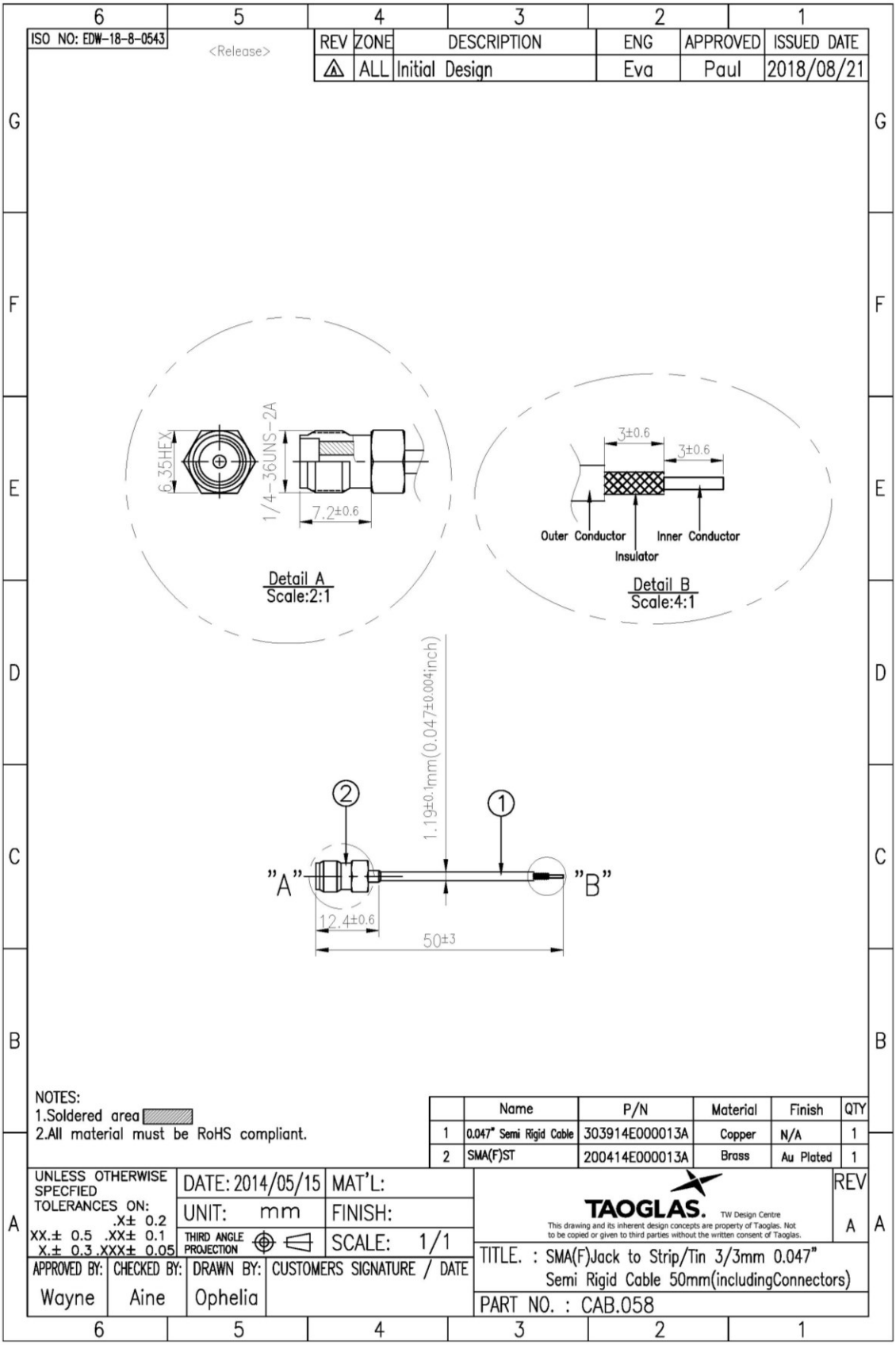
| | | |
|---|---|---|
| 1 | Operating Temperature: | -50°C to +100°C |
| 2 | Max Weight | 4.8 (lbs/1000ft) |
| 3 | Safe Bend Radius(proper tooling) | .050 inches |
| 4 | Corona Extinction | Min. 1.0 KVRMS 60 Hz |
| 5 | Max Operating Frequency | 6GHz |
| 6 | Dielectric Strength | 2.0 KVRMS 60 Hz |
| 7 | Impedance: | 50 ± 1 Ω |
| 8 | Standard Attenuation: | 1GHz 40.0 dB/100ft<br>32W Avg. Power<br>10GHz 130 dB/100ft<br>9W Avg. Power<br>20GHz 190 dB/100ft<br>6.5W Avg. Power |

# 3. Cable Insertion Loss

## 3.1 Insertion Loss



# 4. Mechanical Drawing (Units: mm)



## Changelog for the datasheet

**SPE-15-8-019 – CAB.058**

| **Revision: E (Current Version)** | |
|---|---|
| Date: | 2025-09-16 |
| Changes: | Amended Operating Frequency up to 6GHz |
| Changes Made by: | Cesar Sousa |

**Previous Revisions**

| **Revision: D (Current Version)** | |
|---|---|
| Date: | 2023-04-13 |
| Changes: | Amended Operating Frequency |
| Changes Made by: | Cesar Sousa |

| **Revision: C** | |
|---|---|
| Date: | 2020-01-17 |
| Changes: | Amended S21 |
| Changes Made by: | Jack Conroy |

| **Revision: B (Current Version)** | |
|---|---|
| Date: | 2019-03-27 |
| Changes: | Amended cable Specifications and template |
| Changes Made by: | Jack Conroy |

| **Revision: A (Original First Release)** | |
|---|---|
| Date: | 2017-08-10 |
| Notes: | |
| Author: | Jack Conroy |

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