# **Aluminum Semi-Rigid Cable**Applications Note

### **Plating Integrity, Tin-Plated Aluminum Semi-Rigid Cable**

Semi-rigid cable manufactured with a tin-plated aluminum jacket may show surface imperfections up to and including occasional delamination. This is a function of the dissimilar materials and cannot always be avoided, especially as cables age. Special storage procedures as detailed below will help to mitigate risk, but Micro-Coax recommends installing and soldering tin-plated aluminum cables as soon as possible.

# Why do we see surface imperfections with tin-plated aluminum cable?

The porosity and grain structure of the plated tin, along with the temperature and humidity in which the cable is stored after it has been plated, all impact the shelf life of the plated deposit.

#### Are these conditions avoidable?

Given the combination of metals required to tin-plate the aluminum, we have concluded the plating process is optimized to the best possible outcome.

Thus, occasional imperfections should be anticipated.

#### What is the shelf life of the cable?

Due to several uncontrolled variables, Micro-Coax cannot provide a firm shelf life. Please refer to our storage recommendations below, which may help to minimize this condition.

#### **Disclaimer**

Unfortunately, because of the physical nature of tin-plated aluminum jacketed cable, Micro-Coax will typically not accept returns of this product.

### What are your storage recommendations?

Until ready to use, tin-plated aluminum cable should remain in a sealed container with moisture controls such as desiccant and be stored in a cool and dry environment. These practices will extend the life of the cable but do not guarantee the prevention of surface imperfections.

## How do I know if my cable has a tin-plated aluminum jacket?

Our part description will reflect "AL-TP." You may also see this on any cable marking. If unsure, please contact your account representative.

### What are my options?

Micro-Coax manufactures a wide variety of tin-plated copper jacketed cables, many of which are near equivalents to tin-plated aluminum cables. Please contact your Account Representative for a quotation. Should you have any questions, please contact your Account Representative or email pottstown.sales@micro-coax.com.

