

Aluminum Terminals

1. SCOPE

This specification defines the acceptable and the not acceptable conditions for aluminum terminals.

2. INSPECTION CRITERIA

Unless otherwise specified, Figures are shown at approximately 5X to 10X magnification. Scratches, gouges, blemishes, and handling marks shall be viewed using a microscope at 5X magnification. Proper lighting should be used to determine acceptance.

3. INSPECTION PROCEDURE



Figure 1

● ACCEPTABLE

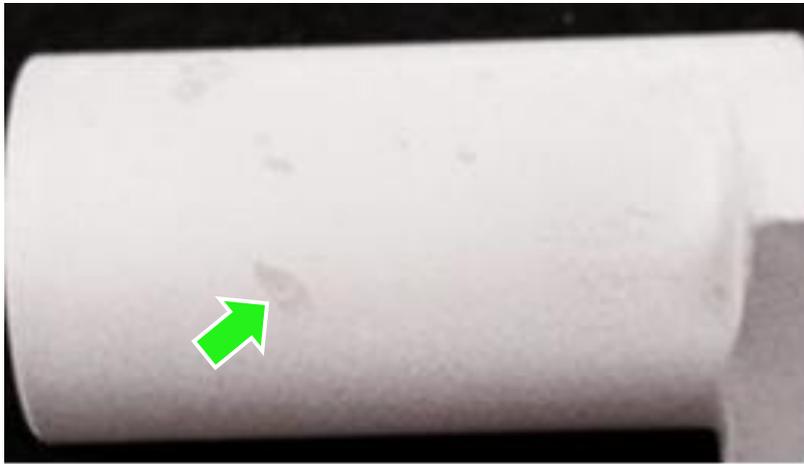
Scratches, gouges, and handling marks with no raised edge felt with a finger tip or fingernail. There will be visible blemishes due to matte finish. Acceptable only if there is no raised edge felt with the finger tip or fingernail.



Figure 2

● ACCEPTABLE

Matte tin has a dull, non-reflective surface that varies in color from ash-white to mid-gray. Lot-to-lot variations are acceptable and do not affect form, fit, or function.



● **ACCEPTABLE**

Superficial staining or slight discoloration that results from rinsing or drying operation during the plating process.

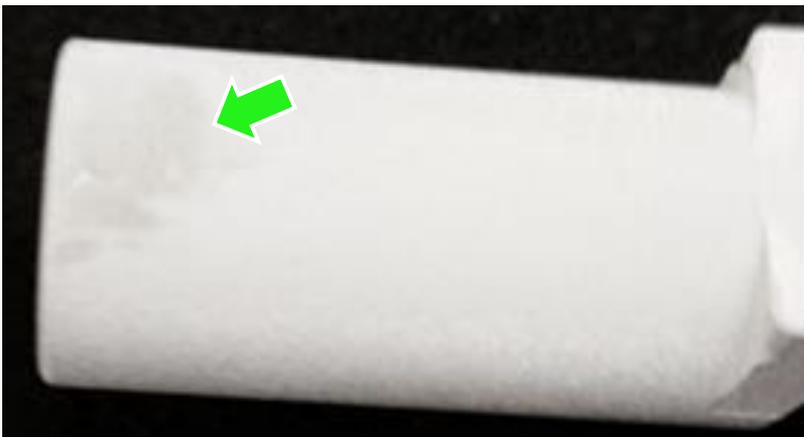


Figure 3



Figure 4

● **ACCEPTABLE**

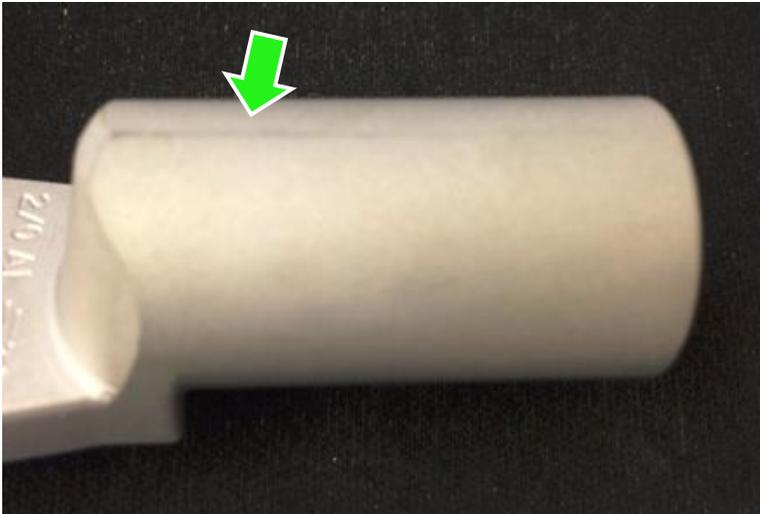
The rack tips or electrodes that make contact with the terminals during the plating process will produce rack contact marks inside the terminal's crimp barrel. Rack contact marks do not affect the form, fit or function of the terminal and therefore are acceptable.



Figure 5

● **ACCEPTABLE**

Matte tin is inherently soft and susceptible to handling damage that can cause superficial surface blemishes or burnishing. This condition is easily seen by the naked eye due to its non-reflective surface. Superficial surface marring and blemishes do not affect fit, form, or function and therefore are acceptable.



● **ACCEPTABLE**

The terminal comes in contact with the tooling during the insertion of the perforated screen. Tool blemish marks not exceeding 1.5 mm (.06 in) width and having no raised edge felt with a finger tip or nail are acceptable.

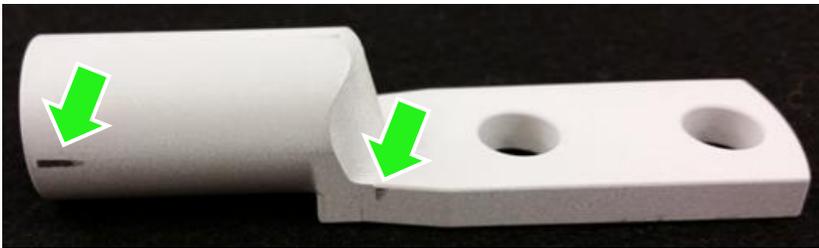
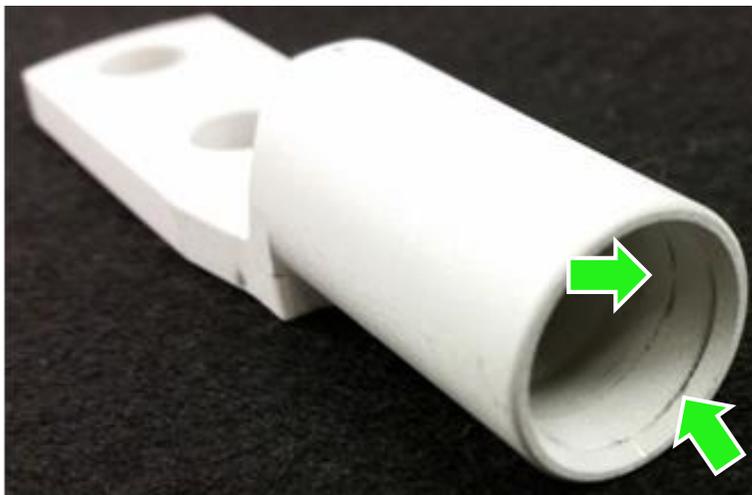


Figure 6



● **ACCEPTABLE**

The terminal comes in contact with the tooling during the insertion of the perforated screen. Tool blemish marks are acceptable in this area.

Figure 7

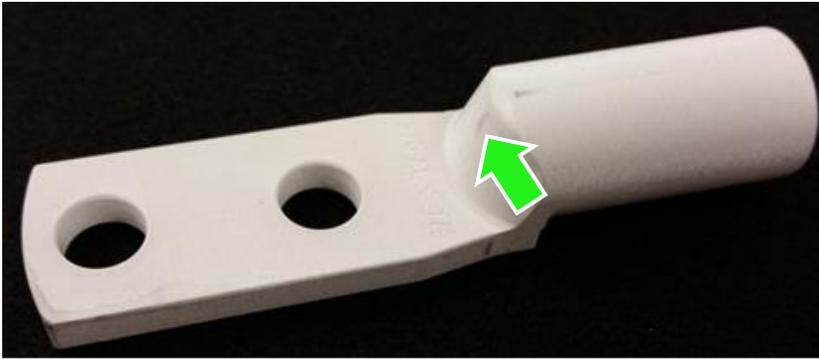


Figure 8

● **ACCEPTABLE**

Tooling blemish mark acceptable on the spherical face of the terminal. Allowed to exceed 1 mm [.04 in] width as long as there is no raised edge felt with the finger tip or fingernail while sliding across it



Figure 9

● **ACCEPTABLE**

Handling blemish not exhibiting visual depth and having no raised edge felt with a finger tip or fingernail while sliding across it.



● **ACCEPTABLE**

Superficial surface burnishes and blemishes not exhibiting a raised edge felt with a fingertip or nail. The condition does not affect the form, fit or function of the terminal.

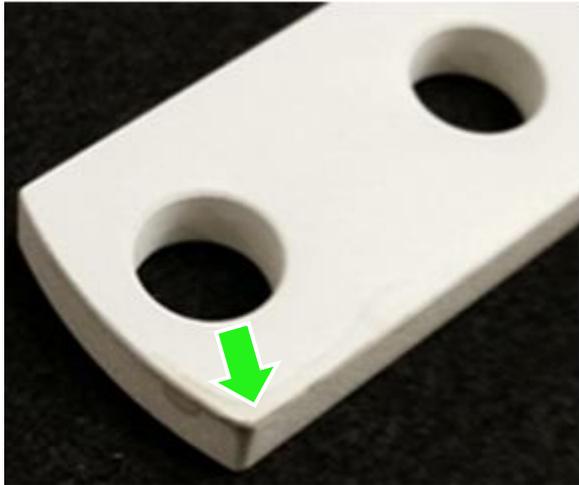


Figure 10

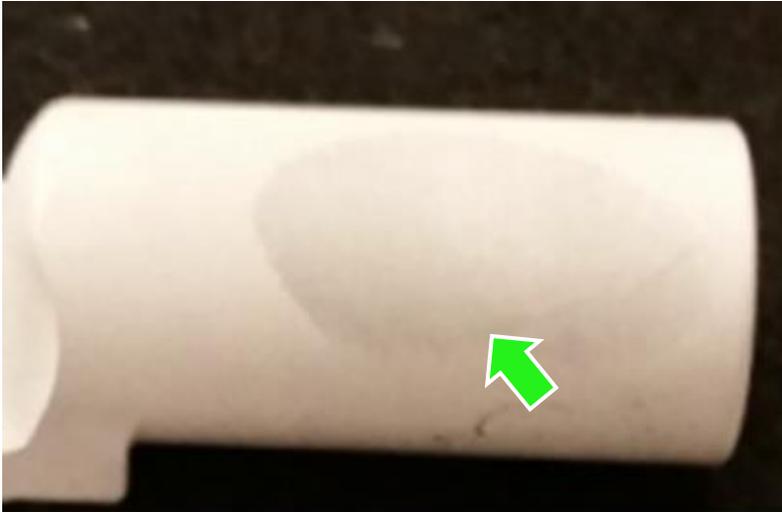


Figure 11

● **ACCEPTABLE**

Surface blemishes from finger marks.

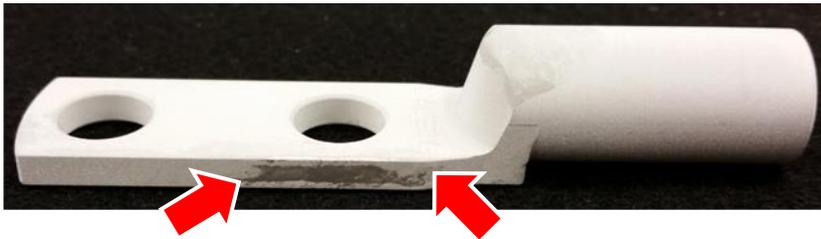


Figure 12

● **NOT ACCEPTABLE**

Any area of the terminal that has missing or insufficient, blistered, cracked or flaking plating.



Figure 13

● **NOT ACCEPTABLE**

Surface contamination or inclusion appearing structurally different and foreign in nature.



● **NOT ACCEPTABLE**

Machining irregularities not conforming to the defined geometry of the terminal.

Figure 14



● **NOT ACCEPTABLE**

Any blemish with a raised edge or depth that can be felt by the fingertip or fingernail.

Figure 15



● **NOT ACCEPTABLE**

Scratches and gouges exhibiting visual depth and having a raised edge felt with a finger tip or fingernail while sliding across it.

Figure 16



Figure 17

● **ACCEPTABLE**

Perforated insert is uniformly staked in position with no edges exposed beyond 0.076 mm [.003 in].



Figure 18

● **NOT ACCEPTABLE**

Perforated insert is exposed beyond 0.076 mm [.003 in].