

### **TRACER - RAPID PROTOTYPING**

FULLY FUNCTIONAL, FULLY CUSTOMIZABLE PROTOTYPES - FAST

PDS - 316



### Introducing Amphenol's newest innovation – TRACER Rapid Prototyping

Achieve any pin-out you can imagine – without sacrificing performance or lead time. Thanks to Amphenol's revolutionary insulator technology, we can rapidly produce connectors in any contact configuration and get you fully functional sample pieces within a week. See page 2 for instructions on how to use the *Tracer Pattern Design Tool*.

MIL-DTL-38999 • REVERSE-BAYONET GT • MIL-DTL-5015 • 2M Micro38999 • And more!

#### FOR NEW DESIGN PROTOTYPING:

- PC boards with cramped layouts that have difficulty routing traces out of traditionally concentric MIL-STD-1560 insert layouts
- Applications that need additional insulation between their power and signal wiring
- Customers who want to avoid using sealing plugs in unused cavities
- Customers who need a path to production that avoids long-lead tooling



### **FEATURES AND BENEFITS:**

### For Board Designers:

- Flexible trace routing for board layer reduction
- Place your board through-holes anywhere for easy trace routing
- Mount board level components under circular connectors

### For Everyone:

- Fully customizable pin-outs
- Samples available in 10 days or less\*
- Can offer variable levels of sealing and environmental ingress protection
- Offers a bridge to full-rate production

\*Connector styles & classes limited if metal housings are required. Composite housings in any configuration also available at the cost of some environmental performance. Contact factory for details.

# **Amphenol**Aerospace

### TRACER PATTERN DESIGN TOOL

### **USER GUIDE**

The *Tracer Pattern Design Tool* will allow users to access 3D models designed to provide visualization of geometries for inserts and contacts, as well as electrical spacing for contacts in our 38999 Series III connectors.

#### **USERS WILL BE ABLE TO:**

- Design Custom Insert Arrangements without the need for an engineer
- Combine these models with their own assemblies to check fit
- Determine connector spacing
- Locate mounting holes









## Click or Scan for more information and Tracer Pattern Design Tool

### **DIRECTIONS:**

- 1. Download Tracer Pattern Design Tool
- **2.** Open Zip Folder and Extract contents then save them in a marked folder on your Desktop.
- 3. Open parametric program.
- **4.** Drag and drop .STP files into your parametric software.
- **5.** Each component should be saved as a .PRT file.

NOTE: There will be a few examples provided of full Insert Arrangements. These should be saved as .ASM files.

- **6.** When the file opens, the 3D model will be visible. Save the file with the Part Number that it came with.
- **7.** Use the extruded quadrant markers to create new datum planes for assembly and location purposes.
  - NOTE: A .STP file erases all dimensions, datum planes, etc. and leaves it as a simple 3D model. The Inserts and Contacts have been designed with extruded quadrant markers to allow for the creation of new datum planes which help with assembly.
- **8.** Place the contact cylinders on the face of the insert cylinders making sure that nothing overlaps.