

# SPECIFICATIONS

**SERIES 600-1, ST600-1, LPST600-1, 610-1, 615-1**  
**(MIL-C-55302/1,/2,/4,/5,/6,/7,/8,/21,/22)**

## FEATURES

Micro-miniature, right-angle and straight-thru pins, and straight-thru sockets, designed for use with single, double and multi-layered board-to-board applications.

Small in size and weight; ruggedly constructed; suitable for use in airborne, ground systems, and commercial applications.

In conformance with the material, finish, design and performance requirements (electrical, mechanical, environmental) of MIL-C-55302.

Suitable for board thicknesses of .062" (1.57mm) and .094" (2.39mm). Readily adaptable to all thicknesses.

Molded-in hollow rivets for secure mechanical attachment to boards.

Built-in board levelers to resist board bowing during soldering.

Guide pins in pin connectors and guide bushings in sockets connectors to assure alignment during engagement.

Low insertion and withdrawal forces.

## MATERIALS & FINISHES

**Molded inserts.** Glass fiber filled diallyl phthalate per MIL-M-14 type SDG-F, green. Exceptions, series ST600-1 sizes 9, 17, 25 and 77 only, and LPST600-1 sizes 9, 17, 25 and 77 only: Thermoplastic polyester per MIL-M-24519 type GPT-30F, green; or optional polyphenylene sulfide per MIL-M-24519 type GST-40F, brown. Designate polyphenylene sulfide with suffix "-R4" on our part number. Example: ST600-1-77P-R4.

**Pin contacts.** Phosphor bronze per QQ-B-750. Gold plated per MIL-G-45204, type II, grade C, class 1, over nickel plate per QQ-N-290, class 2, 50 to 150 microinches.

**Socket contacts.** Phosphor bronze per QQ-B-750. Gold plated per MIL-G-45204, type II, grade C, class 1, over nickel plate per QQ-N-290, class 2, 50 to 150 microinches. Optional socket material: Beryllium copper per QQ-C-530. Designate beryllium copper with prefix "X" on our part number. Example: X600-1-77SD16.

**Guide pins and guide bushings.** Brass per QQ-B-626. Gold plated per MIL-G-45204, type II, grade C, class 1, over copper plating.

## RATINGS

### Test voltages:

Sea level: 1,000 volts rms, 60Hz.

High altitude (70,000 feet): 300 volts rms, 60 Hz.

**Contact size:** #23, .027" (.69mm) diameter.

**Current rating:** 5 amperes maximum.

**Contact resistance**(at 5 amperes): .010 ohm maximum average, .020 ohm maximum individual (per contact).

**Insulation resistance:** 5,000 megohms, minimum.

**Connector mating force:** Does not exceed a value equal to 0.5 pound times the number of contacts.

**Connector unmating force:** Exceeds 0.11 pound times the number of contacts.

**Contact separation force** (individual contact): 0.5 ounce, minimum.

**Contact life:** 500 cycles mating and unmating.

Connectors meet all other requirements of MIL-C-55302 and the applicable specification sheets.

**Series 600-1, ST600-1, LPST600-1, 610-1 and 615-1 are described more comprehensively in our brochure "MIL-C-55302/1 thru /22."**