PC Board Sockets Specifications

**3-Beam SYCAMORE Contact and Twin Beam sockets:**
Surface mount, single piece construction

**Materials**

- **Base material**
  - 3-Beam: Beryllium Copper
  - Twin Beam: Phosphor Bronze
- **Finish:** See individual pages

**Electrical**

- **Current**
  - 3-Beam: 6A max
  - Twin Beam Ø0.8-1.5mm: 5A max
  - Twin Beam Ø1.1-1.8mm: 9A max
- **Contact resistance:** 20mΩ max

**Mechanical**

- **Durability**
  - 3-Beam: 500 operations
  - Twin Beam Ø0.8-1.5mm: 25 operations
  - Twin Beam Ø1.1-1.8mm: 100 operations
- **Insertion force (max)**
  - 3-Beam Ø1.5-1.9mm: 3.5N (Ø1.5mm), 17N (Ø1.9mm)
  - 3-Beam Ø0.8-1.3mm: 3.0N (Ø0.8mm), 6.0N (Ø1.3mm)
  - Twin Beam Ø0.8-1.5mm: 8.0N (Ø1mm), 17N (Ø1.5mm)
  - Twin Beam Ø1.1-1.8mm: 2.8N (Ø1.1mm), 6.0N (Ø1.8mm)
- **Withdrawal force (min)**
  - 3-Beam Ø1.5-1.9mm: 0.5N (Ø1.5mm), 1.0N (Ø1.9mm)
  - 3-Beam Ø0.8-1.3mm: 0.3N (Ø0.8mm), 0.6N (Ø1.3mm)
  - Twin Beam Ø0.8-1.5mm: 0.5N (Ø1mm), 1.0N (Ø1.5mm)
  - Twin Beam Ø1.1-1.8mm: 0.3N (Ø1.1mm), 0.5N (Ø1.8mm)

**Environmental**

- **Operating temperature**
  - 3-Beam: -50°C to +125°C
  - Twin Beam: -40°C to +105°C
- **Solderability:** 235°C for 5 seconds
- **Soldering heat resistance:** 260°C for 10 seconds

**Throughboard, two piece construction**

**Materials**

- **Outer shell:** Brass
- **Inner contact:** Beryllium Copper
- **Finish:** See individual pages

**Electrical**

- **Current**
  - Ø0.50mm: 2A max
  - Ø0.80mm, Ø1.00mm: 10A max
  - Ø2.00mm: 20A max
- **Contact resistance:** 25mΩ max

**Mechanical**

- **Durability**
  - Ø0.50, Ø2.00mm: 500 operations
  - Ø0.80, Ø1.00mm: 1,000 operations
- **Insertion force (max)**
  - Ø0.50, Ø2.00mm: 6.0N
  - Ø0.80mm: 5.0N
  - Ø1.00mm: 9.0N
- **Withdrawal force (min)**
  - Ø0.50mm: 0.5N
  - Ø0.80, Ø1.00, Ø2.00mm: 1.0N
- **Vibration sensitivity:** 10 – 2,000Hz, 0.75mm, 98m/s² (10G), 6 hours duration

**Environmental**

- **Operating temperature:** -55°C to +125°C
- **Solderability:** 235°C for 5 seconds
- **Soldering heat resistance:** 260°C for 10 seconds