

PC Board Sockets

➤ Surface Mount, Single Piece construction

A choice of twin-beam or 3 contact beams, ultra low profile Surface Mount PCB Contacts, designed for automated assembly processes.

Single part construction, with flat upper surface for pick and place location to the PCB - supplied in Tape and Reel packaging.

Each contact type provides a wide range of mating pin sizes, for greater design flexibility.

- **Ultra-Low profile.**
- **Suitable for high volume applications with automated SMT systems.**
- **Reduces process costs with the elimination of secondary socket soldering operations.**

➤ Throughboard, Two Piece construction

A range of 4-beam and 6-beam (also known as fingers) sockets, designed for robustness and reliability, and based on the same design as the Datamate and M300 four finger Beryllium Copper contacts.

The socket design is a two-part construction comprising of a contact clip retained in a precision-turned outer shell.

Options for the shell include closed or open-ended, with or without a knurled section for added board retention.

- **High reliability contacts. Proven history in high end Industrial and Mil/Aero applications.**
- **Suited for use in environments where high vibration, shock and extremes of temperature are a consideration.**
- **Gives the added flexibility of custom board layouts.**

Specifications

➤ Materials

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

➤ Electrical

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

➤ Mechanical

Durability	
Twin Beam Ø0.8-1.5mm:	25 operations
Twin Beam Ø1.1-1.8mm:	100 operations
3-Beam:	500 operations
Insertion force (max)	
Twin Beam Ø0.8-1.5mm:	8.0N (Ø1mm), 17.0N (Ø1.5mm)
Twin Beam Ø1.1-1.8mm:	2.8N (Ø1.1mm), 4.5N (Ø1.8mm)
3-Beam Ø1.5-1.9mm:	3.5N (Ø1.5mm), 17.0N (Ø1.9mm)
3-Beam Ø0.8-1.3mm:	3.0N (Ø0.8mm), 6.0N (Ø1.3mm)
Withdrawal force (min)	
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)
3-Beam Ø1.5-1.9mm:	0.5N (Ø1.5mm), 1.5N (Ø1.9mm)
3-Beam Ø0.8-1.3mm:	1.0N (Ø0.8mm), 2.0N (Ø1.3mm)

➤ Environmental

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

➤ 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/s ² (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