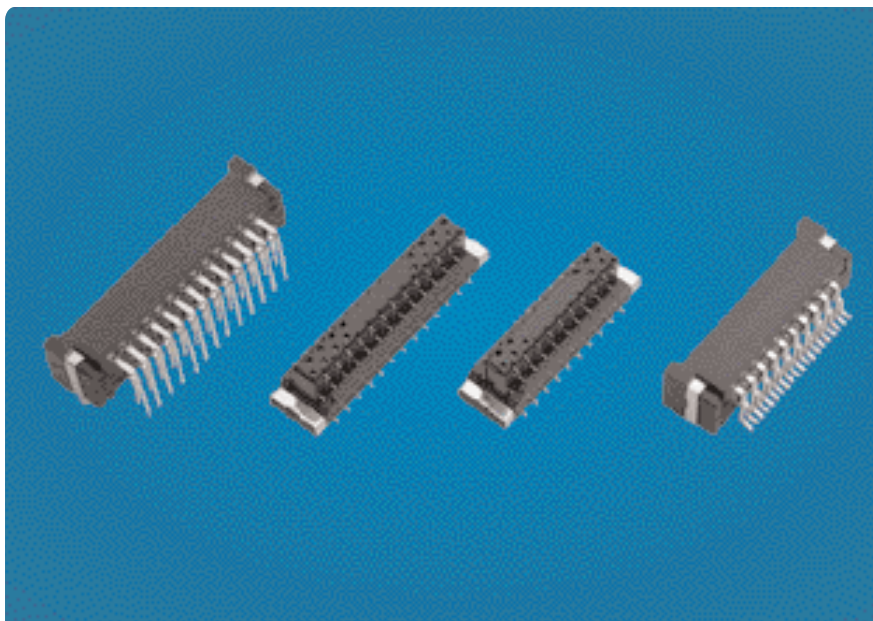


## BTFW SERIES

### DESCRIPTION

The BTFW Series is a floating board-to-board connector system consisting of plugs and receptacles with two rows of staggered contacts on 1.00 mm (0.039 in.) centerlines. This connector system is designed for applications that require high density and high reliability interconnects with higher pin counts and surface mount termination, such as audio video (AV) and navigation systems in automobiles.

The BTFW Series includes: vertical surface mount plugs; right angle SMT and through hole receptacles. The contacts have a wide floating allowance of  $\pm 0.80$  mm (0.031 in.) in the pitch direction and  $\pm 0.50$  mm (0.020 in.) in the width direction. The rigid entry guide design features a wide guide distance for mating of  $\pm 2.00$  mm (0.079 in.) in the pitch direction and  $\pm 0.80$  mm (0.031 in.) in the width direction.



### FEATURES & BENEFITS

- 1.00 mm (0.039 in.) staggered contact design saves valuable board space
- Wide floating allowance absorbs mating shift between plug and receptacle, permitting self-alignment of the mating connectors; and provides highly reliable mechanical performance
- Rigid entry guide design withstands rough handling such as angled insertion, preventing contact deformation; and provides vibration shock absorption
- Wide guide distance for mating assures easy handling and correct mating of the plug and receptacle, and allows blind mating
- Mounting plates on both sides of the plug and receptacle assure PCB retention
- Flat top surfaces of SMT housings allow pickup with vacuum nozzle and eliminate the need for pickup covers that must be removed after soldering

### TARGET MARKETS / APPLICATIONS

- Consumer
  - PDP displayer & TV
  - LCD displayer & TV
  - Set top boxes
  - DVD players/recorders
  - D-VHS players
- Data
  - Entertainment PC
- Other
  - POS terminals
  - Barcode scanners
  - Other handheld equipment

## MATERIALS

- Housing: Glass filled thermoplastic (UL 94 V-0)
  - Color: Black
- SMT plug
  - Contact: Phosphor bronze
  - Contact plating: Tin alloy
- SMT and DIP receptacle
  - Contact: Brass
  - Contact plating: Tin alloy
- Mounting plate
  - Contact: Brass
  - Contact plating: Tin alloy

## ELECTRICAL PERFORMANCE

- Contact resistance: 70 mΩmax. initial
- Insulation resistance: 100 MΩ min.
- Dielectric withstanding voltage: 500 V AC rms, 60 Hz
- Current rating: 1 A

## PART NUMBERS

### BTFW\_ \_P-3SSTE1LF Vertical (Straight) SMT Plug

- \_ \_ = 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 contacts
- P = Plug
- 3 = Two rows of staggered contacts
- S = Vertical (straight)
- ST = Surface mount (SMT)
- E1 = Embossed tape-and-reel packaging
- LF = Lead free/Rohs compliant

### BTFW\_ \_R-3RSTE1LF Right Angle SMT Receptacle

- \_ \_ = 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 contacts
- R = Receptacle
- 3 = Two rows of staggered contacts
- R = Right angle
- ST = Surface mount (SMT)
- E1 = Embossed tape-and-reel packaging
- LF = Lead free/Rohs compliant

### BTFW\_ \_R-3 R D7LF Right Angle DIP Receptacle

- \_ \_ = 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 contacts
- R = Receptacle
- 3 = Two rows of staggered contacts
- R = Right angle
- D7 = DIP
- Tray packaging
- LF = Lead free/Rohs compliant

## MECHANICAL PERFORMANCE

- Mating force: 2.5 N per contact max.
- Unmating force: 0.2 N per contact max.
- Contact wipe: 1.6 mm (0.063 in.)
- Durability: 20 mating cycles

## ENVIRONMENTAL PROPERTIES

- Operating Temperature range
  - -55°C to +85°C

## SPECIFICATIONS

- Product Specification: SC-BTFW 01

## PACKAGING

- Embossed tape-and-reel for SMT connectors
- Trays for DIP connectors