

# BTFW SERIES

## OVERVIEW

The BTFW Series is a floating board-to-board connector system consisting of plugs and receptacles with two rows of staggered contacts on 1.00mm (0.039in.) 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  $\pm 0.80\text{mm}$  (0.031in.) in the pitch direction and  $\pm 0.50\text{mm}$  (0.020in.) in the width direction. The rigid entry guide design features a wide guide distance for mating of  $\pm 2.00\text{mm}$  (0.079in.) in the pitch direction and  $\pm 0.80\text{mm}$  (0.031in.) in the width direction.



## FEATURES & BENEFITS

- 1.00mm (0.039in.) 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





## TECHNICAL INFORMATION

### MATERIALS

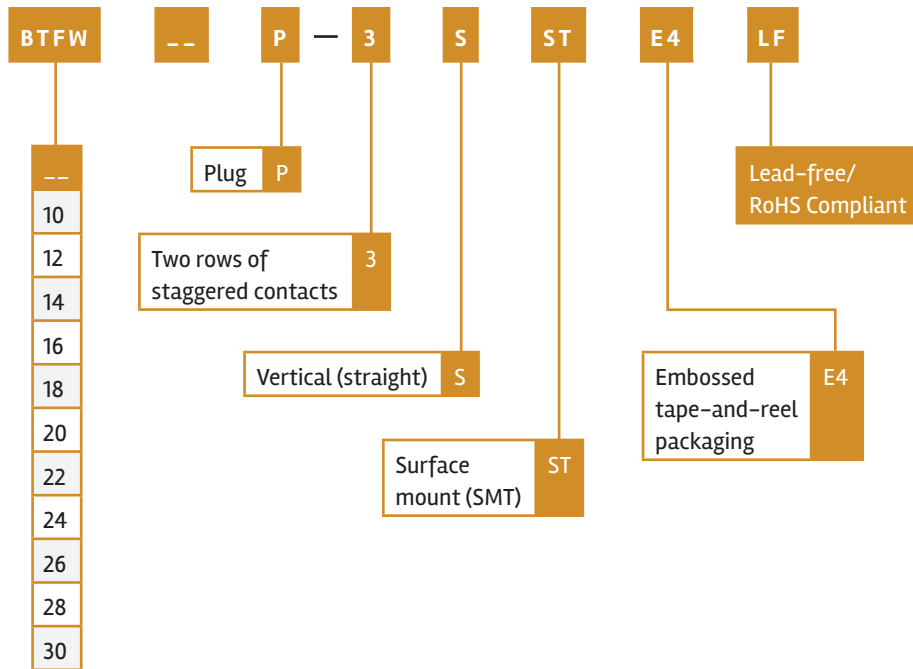
- Housing: Glass filled thermoplastic (UL94V-0)
  - Color: Black
- SMT plug
  - Contact: Phosphor bronze
  - Contact plating: Tin alloy
- SMT and DIP receptacle
  - Contact: Brass
  - Contact plating: Tin alloy
- Mounting plate
  - Contact: Brass
  - Contact plating: Tin alloy

### ELECTRICAL PERFORMANCE

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

### PART NUMBER

#### VERTICAL (STRAIGHT) SMT PLUG



### ENVIRONMENTAL

- Functional temperature range: -55°C to +85°C

### MECHANICAL PERFORMANCE

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

### SPECIFICATIONS

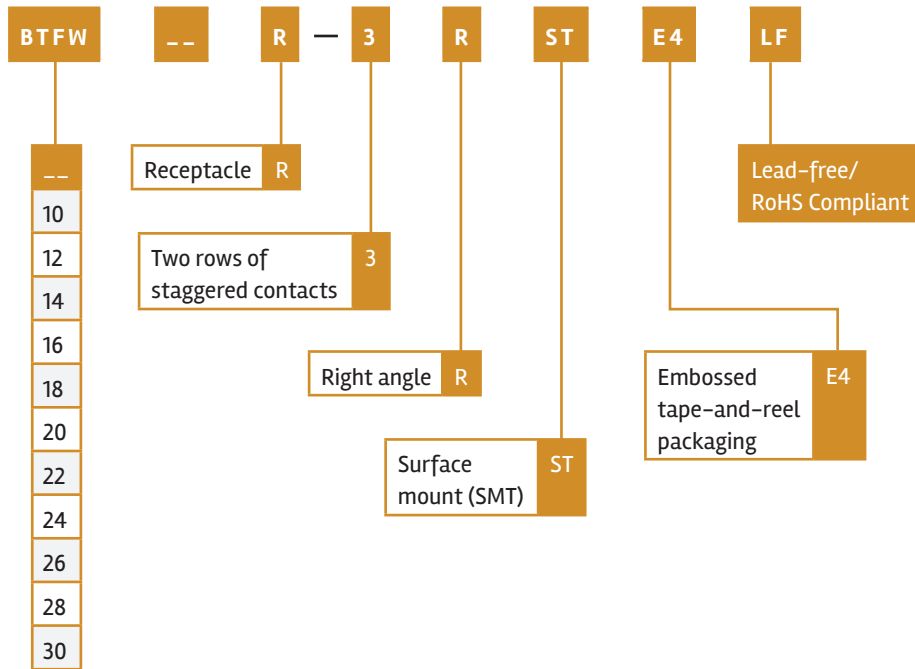
- Product specification: GS-12-555

### PACKAGING

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

## PART NUMBER

### RIGHT ANGLE SMT RECEPTACLE



### RIGHT ANGLE DIP RECEPTACLE

