

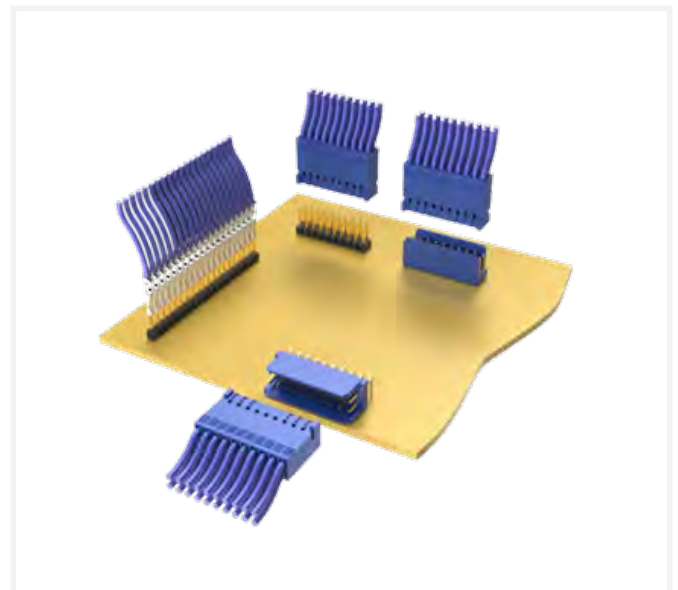
# Dubox® Wire-to-Board

## MODULAR, RELIABLE, AND COMPACT SOLUTION

The Dubox® 2.54mm wire-to-board connectors offer an extensive range of through-hole part options, including single or double-row in either vertical or right-angle orientation from 2 to 62 positions, with a maximum current rating of 3A () per individual contact.

The Dubox® contact has a pre-stressed, dual beam design to enable low insertion force, 4-wall contact design for signal protection and supports up to 200 mating cycles (plating dependent).

- Uniform dual-beam design across the range
- Reliable connection for demanding applications
- Fully compatible with standard BergStik® headers



### TARGET MARKETS



### FEATURES

- Dual beam contact design
- Pre-stressed contact
- Mates with very short pins (5mm) and are stackable end-to-end and side-by-side
- Floating solder tails with self-centering on the circuit pads
- 4 wall contact design
- Duplex plating
- Locating feature available
- High Temperature thermoplastic material
- Compliant to DIN41651 specifications, HE13 and BT D2632

### BENEFITS

- Highly reliable electrical performances
- Low insertion force
- Suitable for mezzanine applications and meets different application requirements.
- Assures coplanarity
- Improved signal protection
- Cost efficient
- Maintains the alignment for soldering and facilitates robotic placement
- Compatible with Infra-Red and Vapor-Phase reflow
- Qualifies industry specific standards

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High temperature thermoplastic
- Colour: TMT: Blue and SMT: grey
- Contact: Phosphor bronze (CTW contacts) / copper alloy (shrouded headers)
- Plating: 0.76µm (30µ") Gold / GXT® over 1.27µm (50µ") nickel or 2.0µm matte tin full plated

### MECHANICAL PERFORMANCE

- Contact Normal Force: 0.6N
- Contact Retention Force to Housing: 15N per contact
- Insertion Force per Gold Contact: 1.30N (CTW contacts)
- Withdrawal Force per Gold Contact: 0.30N (30gf) min.
- Contact Wiping Length: 1.5mm
- Insertion Depth: 3.6–5.6mm (discrete wire) / 5.1–6.2mm (crimp-to-wire housing)
- Pin Retention to Housing: 20N min. (shrouded headers)
- 200 Mating cycles (gold plating)
- Wire Sizes: 22AWG–20AWG & 30AWG–22AWG & 32 AWG–28AWG

### ELECTRICAL PERFORMANCE

- Current Rating: 3A continuous
- 2A DC max. per contact for fully energized connector
- Insulation Resistance: 1 x 10<sup>5</sup>MΩ min.
- Dielectric Withstanding Voltage: 1000Vrms min.
- Contact Resistance: 15mΩ max dielectric
- 20MΩ max. after environmental tests

### ENVIRONMENTAL

- Operating Temperature Range: –65°C to +125°C

### SPECIFICATIONS

- Product Specification: BUS–12–055 (gold) / BUS–12–066 (tin)
- Hand tool: 10164488–001 (AWG 20)  
10164489–001 (AWG 24)

### APPROVALS & CERTIFICATION

- UL approval: E66906

### PACKAGING

- PCB Header: Polybags or tubes
- CTW housing: Polybags
- Crimping terminal: Reel

### TOOLING INFORMATION

- Insertion tool: 30AWG to 20AWG

### TARGET MARKETS/APPLICATIONS



Personal Care Devices (Air Dryer)  
Home Care Devices (Cleaning Robot)  
Home Automation (Alarm System)



Server  
Storage

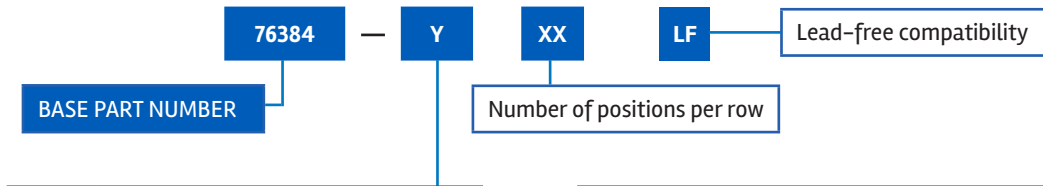


Industrials (Robotics, PLC, Power tool)

## PART NUMBERS

Description	Part Numbers
Shrouded Header, Vertical, Through Hole, Single Row	76384
Shrouded Header, Right-Angle, Through Hole, Single Row	76382
Shrouded Header, Vertical, Through Hole, Double Row	76385
Shrouded Header, Right-Angle, Through Hole, Double Row	76383
CTW Housing, Single Row	65240
CTW Housing, Double Row	65239
Dubox® CTW contact	76347

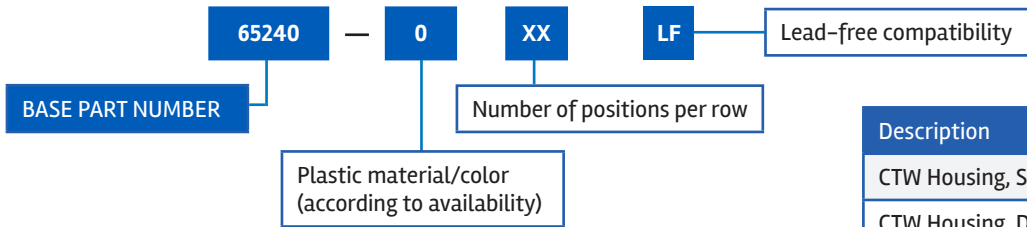
## PART NUMBER SELECTOR SHROUDED HEADER



Plating Option	
3	0.76µm GXT on contact area
4	2µm tin on contact area
Other plating options available upon request	

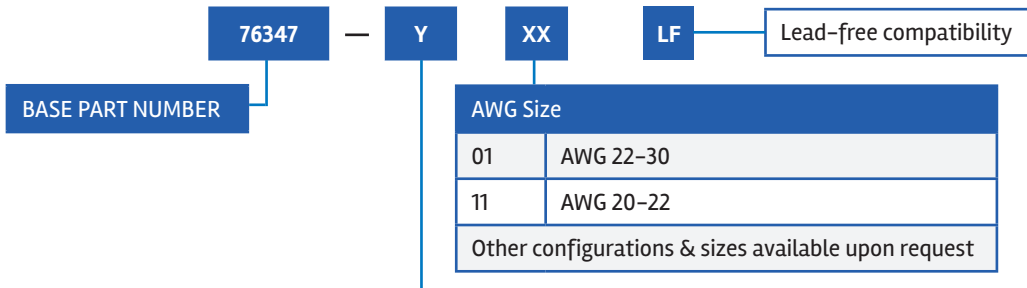
Description	Part Numbers
Shrouded Header, Vertical, Through Hole, Single Row	76384
Shrouded Header, Right-Angle, Through Hole, Single Row	76382
Shrouded Header, Vertical, Through Hole, Double Row	76385
Shrouded Header, Right-Angle, Through Hole, Double Row	76383

## PART NUMBER SELECTOR CTW HOUSING



Description	Part Numbers
CTW Housing, Single Row	65240
CTW Housing, Double Row	65239

## PART NUMBER SELECTOR CTW CONTACT



Plating Option	
3	0.76µm GXT on contact area
4	2µm tin on contact area
Other plating options available upon request	

Description	Part Numbers
Dubox® CTW contact	76347