## **Dubox® SHUNTS Board/Wire-to-Board Connectors**

# RELIABLE DESIGN, ENHANCED RETENTION

Amphenol's Dubox® SHUNTS has a comprehensive and extensive solution designed with solder tails self center on circuit pads to assure coplanarity. A locating feature helps to maintains alignment for soldering and facilitates robot placement.

- Dual beam contact design to ensure high reliable electrical performances
- Contact pre-stressed that requires low insertion force required
- 4 wall contact design for signal protection



#### **FEATURES**

- Dual beam contact design
- Pre-stressed contact
- Mates with very short pins (5mm) and are stackable endto-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 Infrared and Vapor phase reflow
- Qualifies industry specific standards

#### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Housing: High temperature, black thermoplastic
- Flammability Rating: UL94V-0
- Pin: Phosphor Bronze
- Plating: Gold or Tin over 1.27μm (50μin.) Nickel

#### **MECHANICAL PERFORMANCE**

- Mating cycles (durability): 50-Gold, 25-Tin
- Insertion force:
- 450gf max. per gold contact
- 500gf max. per tin-lead contact
- Withdrawal force:
  - 30gf min. per gold contact
  - 30gf min. per tin-lead contact
- Insertion depth:
- 4.85 mm (.191in.) min. [provides 3.81 mm (.015in.) wipe] Low profile

#### **ELECTRICAL PERFORMANCE**

- Current Rating: 2.5A max. per contact
- Insulation Resistance: 50,000M $\Omega$  min.
- Contact Resistance: 15M $\Omega$  max. initial, 20M $\Omega$  max. after environmental tests
- Dielectric Withstanding Voltage: 800V

#### **SPECIFICATIONS**

- 51 File No. E66906
- **(§)** File No. LR46923
- Product Drawing: By 5-digit base part number
- Product Specification:
- BUS-12-071-gold
- BUS-12-070-tin

#### **ENVIRONMENTAL**

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

#### **APPROVALS & CERTIFICATION**

 This product is RoHS compatible according to the European Union Directive 2002/95/IEC

#### **PACKAGING**

Plastic bags

#### **TARGET MARKETS/APPLICATIONS**



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

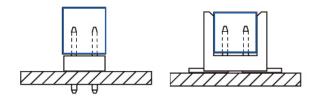


Sever Storage



Industrials (Robotics, PLC, Power tool)

## **TYPICAL APPLICATIONS**



## **PART NUMBERS**

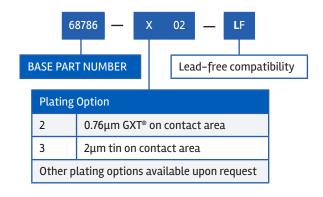
Description	Part Series
Shunt Low Profile, Single Row	68786
Shunt Low Profile, Double Row, Multi-position	87606
Shunt Standard, Single Row	63429

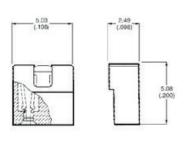
## PART NUMBER SELECTOR SHUNTS

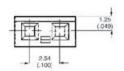
#### **CORE RANGE**



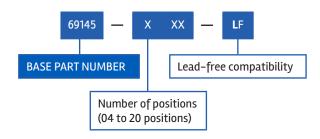
#### **LOW PROFILE**

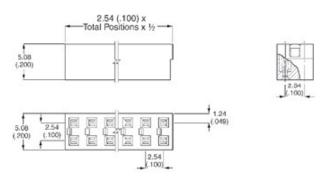






#### **MULTI-POSITION**





#### **STANDARD**

