Amphenol

≣FCi Basics

Dubox® PCB Receptacles

MODULAR, RELIABLE, AND COMPACT SOLUTION

The Dubox[®] connector families offer an extensive range of through-hole and surface-mount part options, including single or double-row in either vertical or right angle orientation from 2 to 50 positions per row, with a current rating of 3A (maximum) 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
- High-temperature material
- Mezzanine and coplanar connectivity
- 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 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 performing raw material
- Compliant to DIN 41651 specifications, HE 13 and BT D2632

BENEFITS

- Highly reliable electrical performances
- Low insertion force required
- Meets your specific needs and is useful for Mezzanine application
- 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 thermoplastic
- Contact: Phosphor Bronze
- Plating: 0.76μm (30μin) Gold / GXT[®] over 1.27μm (50μin) Nickel or 2.0μm matte Tin full plated

MECHANICAL PERFORMANCE

- Contact Normal Force: 0.6N
- Insertion Force per Gold Contact: 1.50N (150gf) max.
- Withdrawal Force per Gold Contact: 0.30N (30gf) min.
- Contact Wiping Length: 1.5mm
- 200 Mating Cycles (Gold plating)

ELECTRICAL PERFORMANCE

- Current Rating: 3A continuous

2ADC max. per contact for fully energized connector

- Insulation Resistance: 1 x 10⁵ MΩ min.
- Dielectric Withstanding Voltage: 1000Vrms min.
- Contact Resistance: 15mΩ max. dielectric

 $20M\Omega$ max. after environmental tests

ENVIRONMENTAL

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

SPECIFICATIONS

Product Specification: BUS-12-055 (Gold) / BUS-12-066 (Tin)

APPROVALS & CERTIFICATION

UL Approval: E66906

PACKAGING

Polybags, Tubes or Reel

TARGET MARKETS/APPLICATIONS



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



Sever Storage



Industrials (Robotics, PLC , Power Tool)



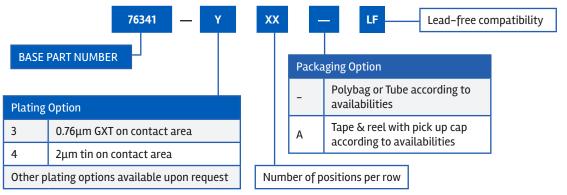
PART NUMBERS

Description	Part Numbers	Preferred Parts
Receptacle, Vertical, Single Row, TMT, Top Entry, Low Profile 7.00mm height	76341	\checkmark
Receptacle, Vertical, Double Row, TMT, Top Entry, Low Profile 7.00mm height	76342	\checkmark
Receptacle, Vertical, Single Row, TMT, Dual Entry	77424	
Receptacle, Vertical, Double Row, TMT, Dual Entry	89847	
Receptacle, Vertical, Single Row, SMT, Dual Entry, Low Profile 7.00mm height	91601	\checkmark
Receptacle, Vertical, Double Row, SMT, Dual Entry, Low Profile 7.00mm height	89898	\checkmark
Receptacle, Right-Angle, Single Row, TMT	89882	
Receptacle, Right-Angle, Double Row, TMT	89883	
Receptacle, Right-Angle, Single Row, SMT	71607	
Receptacle, Right-Angle, Double Row, SMT	71609	

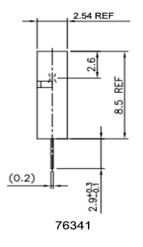
Find part number details using the search box on www.amphenol-cs.com

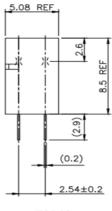
www.amphenol-cs.com

PART NUMBER SELECTOR PCB RECEPTACLE

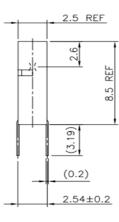


Example: 76341-307LF





76342

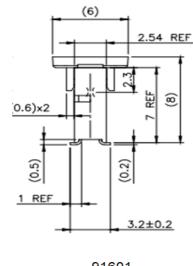


77424

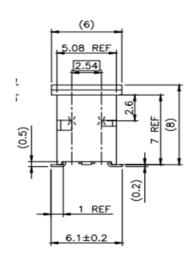
Add basic dimensions to the low Profile version (like distance between tails and tail length)



89847



91601

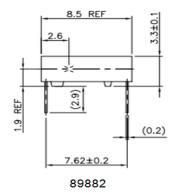


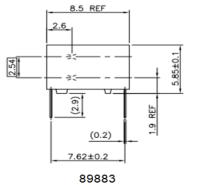
89898

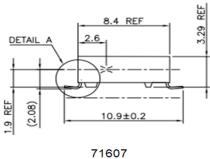
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Please note that the above information is subject to change without notice.

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71609

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