

## FlexFast™ Mini Flex-to-Board

# MORE FLEXIBLE ASSEMBLY AUTOMOTIVE GRADE CONNECTOR SYSTEM

FlexFast™ Mini Flex-to-Board connector's compact design addresses the growing demand for the automotive applications market. The connector is designed to be compliant with USCAR and LV-214 specifications.

The connector has a current carrying capacity of 1A per contact.

FlexFast™ Mini 1.0mm pitch is available in a 22-position configuration. It features a single flex design with a right angle SMT configuration.

- USCAR, LV-214 compliant
- Gold plated reduce mating force
- Position and pitch optional
- CPA (Connector Position Assurance)
- FPA (Flex Position Assurance)
- FPC and FFC in compatibility
- Double beams and contacts
- Scoop proof
- Low height of 5.5mm max.



#### **FEATURES**

- Gold plating process for terminal
- Low height of 8.0mm max.
- CPA (Connector Position Assurance)
- FPA (Flex Position Assurance)
- Double beams and contacts

#### **BENEFITS**

- Low mating and un-mating force
- Space-saving
- Ensures that connectors are properly mated and locked together
- Ensures proper flex insertion position and retention
- Better vibration and contact performance

### **TECHNICAL INFORMATION**

#### **MATERIAL**

• Connector Contact: Copper Alloy

■ Housing: High temperature UL94V-0

• Plating: Gold plated

#### **MECHANICAL PERFORMANCE**

• Durability: 30 cycles

• Mating/Un-mating Force:45N max.

• Connector Retention Force: 75N min.

• Flex Retention Force: 110N min.

#### **ELECTRICAL PERFORMANCE**

Voltage Rating: 12VAC/VDC

• Insulation Resistance:  $100M\Omega$  min.

• Contact Resistance:  $25m\Omega$  max. (initial)

Current Rating: 1A

• Low Level Contact Resistance:  $<25m\Omega$ 

■ Dielectric Withstand Voltage: 500VAC

#### **PACKAGING**

• Header: Tape and reel

• Receptacle Housing: Tape and reel

#### **APPROVALS AND CERTIFICATIONS**

USCAR

■ LV-214

#### **SPECIFICATION**

■ Product Pitch: 1.80mm, 0.50mm

• Flex Stiffener Thickness: 0.40mm

■ PCB Termination: 1.60mm

#### **ENVIRONMENTAL**

■ Operating Temperature Range: -40°C to +125°C

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

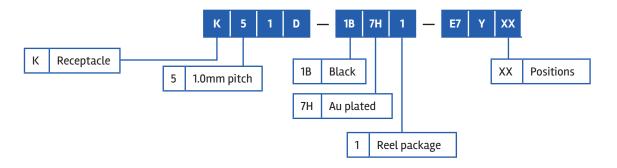


BMS (Battery Management System)
OBC (On-board Charger)
MCU (Micro Control Unit)

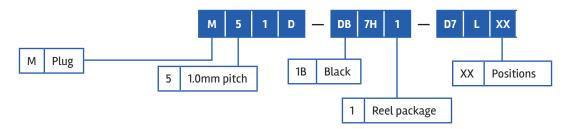


Robotics

## PART NUMBER SELECTOR-RECEPTACLE



## PART NUMBER SELECTOR-PLUG



# **PART NUMBERS**

Description	Part Numbers
FlexFast™ Mini, Receptacle R/A, 1.0mm Pitch, 22 Position, Code A, H5.5mm	K51D-1B7H1-E7Y22
FlexFast™ Mini, Plug, 1.0mm Pitch, 22 Position, Code A	M51D-DB7H1-D7L22

Find part number details using the search box on <a href="www.amphenol-cs.com">www.amphenol-cs.com</a>