

PREMO-FLEX SLIMSTACK FFC/FPC JUMPER SOLUTIONS

PRODUCT OVERVIEW

Ideal for a wide range of microminiature data transmission applications, Premo-Flex SlimStack Flat Flexible Cable (FFC)/Flexible Printed Circuit (FPC) Jumpers support up to 30Gbps data rates using a compact, flexible form factor. The jumpers utilize 0.35mm-pitch SlimStack flex-to-board connectors and offer impedance matching for HDMI (100 Ohm) or USB (90 Ohm) protocols.

SOLVING INDUSTRY CHALLENGES

INDUSTRY CHALLENGE	PRODUCT SOLUTION
ROBUST CONNECTIVITY AND VERSATILE DESIGN Manufacturers need versatile connectivity solutions that can support a variety of applications in a standardized, high-performance design.	Premo-Flex SlimStack FFC/FPC Jumpers are off-the-shelf solutions that are ideal for a diverse array of applications. Dedicated power, ground and signal pins allows two different voltages in the same cable, while controlled impedance enables use with HDMI and USB protocols.
COMPACT FORM FACTOR Incorporating more functionality into smaller devices requires compact connectors that can support high circuit counts while maintaining high reliability.	Premo-Flex SlimStack FFC/FPC Jumpers incorporate compact SlimStack Connectors, enabling them to provide up to 50 circuits with a 0.35mm pitch and a mated height of 1.27mm including the cable. Tactile feedback confirms proper mating, helping ensure a secure and complete connection.
EXCEPTIONAL PERFORMANCE Enabling high-speed communication for advanced applications means interconnects must deliver high data rates and superior signal quality in a dense environment.	Supporting data rates up to 30Gbps, Premo-Flex SlimStack FFC/FPC Jumpers operate at 5 GHz with an insertion loss of 10 dB per foot (30.5cm), providing exceptional signal quality even in dense and noisy environments.





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ADVANTAGES AND FEATURES





ENABLES FLEXIBLE HIGH-SPEED DATA AND POWER CONNECTIVITY

Dedicated power, ground and signal pins enable flexible operation with two different voltages in the same cable or a single voltage using both rails for higher current handling.

PROVIDES HIGH-SPEED DATA TRANSMISSION High-performance SlimStack Connectors and FFC jumpers deliver data rates up to 30Gb

deliver data rates up to 30Gbps, operating at 5 GHz, with an insertion loss of 10 dB per foot (30.5cm).



MINIMIZES SPACE REQUIREMENTS

Miniaturized 0.35mm-pitch connectors and a low-profile mated height of 1.27mm (including cable) simplify design work for space-constrained applications.



SUPPORTS MULTIPLE DATA PROTOCOLS

Controlled impedance of 50 Ohms (single ended) or 95 Ohms (differential) with ±10% matching enables use with HDMI and USB protocols.

APPLICATION SPOTLIGHT

PROVIDING HIGH-SPEED DATA TRANSMISSION AND SUPERIOR SIGNAL INTEGRITY FOR MINIATURIZED APPLICATIONS Compact, high-performance devices such as smartphones, wearables and user interfaces need high-speed interconnects that deliver mechanical robustness and exceptional signal quality in a miniaturized form factor. Premo-Flex SlimStack FFC/FPC Jumpers incorporate low-profile 0.35mm-pitch SlimStack Connectors, offering versatile high-speed FFC/FPC connectivity in an off-the-shelf solution ideal for a wide range of applications:

Smartphones	Portable audio devices	Vehicle infotainment devices	Refrigerators
Wearable devices	Medical monitoring devices	Servers	Washing machines

ORDERING INFORMATION

Series	15011
Pitch	0.35mm
Current	Up to 0.3A
Voltage	Up to 60V DC/AC (RMS)
Data Rates	Up to 30Gbps
Frequency	5 GHz
Impedance	50 Ohms (single ended) or 95 Ohms (differential) ±10%
Termination	SlimStack Connector, series 216700
Circuit Count	20, 40, 50
Jumper Lengths	102, 152, 305mm
Mated Height	1.27mm including cable
Operating Temperatures	-40 to +85°C

www.molex.com/en-us/products/cable-assemblies/flat-flexible-cables-ffc

