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CUSTOMER CHALLENGES

Prototyping for UL Testing Prototyping cable assemblies requires tooling to crimp terminals. Therefore, costs generated to prototype a system for UL testing can be significant.

Manufacturing Hurdles
Once prototyping is complete, customers typically
need to create drawings and assign resources to
find a supplier to build cable assemblies for end
products.

Product Quality

Various connector challenges can result in endproduct failures such as mis-mated connectors, terminal backout and other assembly errors.

Off-the-Shelf (OTS) Discrete Wire Cable Assemblies

Molex Introduces Off-the-Shelf (OTS)
Discrete Wire Cable Assemblies

Standard discrete wire cable assemblies deliver OTS solutions with a broad offering of Molex connectors and a variety of cable lengths to facilitate both prototyping and global production.

Single-row (SR) and double-row (DR) options are available with a variety of connectors for a wide range of applications.



PICO-LOCK STANDARD DISCRETE CABLE ASSEMBLIES



Pico-Lock Cable Assembly offers a low profile, high current and positive locks

Ideal for applications requiring space savings and secure mating retention

PICO-CLASP STANDARD DISCRETE WIRE CABLE ASSEMBLIES



Pico-Clasp Cable Assembly offers a small 1.00mm pitch and 1.0A current rating with positive lock

Delivers space savings and prevents wire hooking

PICOBLADE STANDARD DISCRETE WIRE CABLE ASSEMBLIES



PicoBlade Cable Assembly capable of carrying a maximum 1.0A of current with 1.25mm pitch

Provides the same current as 2.00mm pitch systems but in a more compact design. Ideal for high-density harness applications



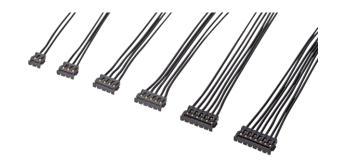
OTS PICO-SPOX 1.5 TIN DISCRETE WIRE CABLE ASSEMBLIES



Pico-Spox 1.5 Tin Discrete Wire Cable Assemblies deliver up to 3.0A of current and offer a variety of circuit sizes

Provides latch protection with unique friction lock and helps secure terminal retention; Facilitates both prototyping and global preproduction

PICO-EZMATE DISCRETE WIRE CABLE ASSEMBLIES



Pico-EZmate Discrete Wire Cable Assemblies deliver up to 5.0A of current with 1.00, 1.20 or 1.80mm pitch

Provides high current capacity for spaceconstrained applications with a low profile and a dual-locking system for secure retention and reliable operation MICROCLASP STANDARD DISCRETE WIRE CABLE ASSEMBLIES



MicroClasp Cable Assembly capable of carrying a maximum 3.0A of current with 2.00mm pitch

Provides space savings and easy mating/unmating compared to similar 2.00- and 2.50mm-pitch wire-to-board systems



OTS MICRO-LATCH 2.0 DISCRETE WIRE CABLE ASSEMBLIES



OTS Micro-Latch 2.0 Discrete Wire Cable Assemblies deliver up to 2.5A of current with a 2.00mm pitch and offer a variety of circuit sizes and cable lengths

Provides compact electrical and mechanical reliability that meets automotive, consumer and manufacturing industry requirements

OTS MICRO-LOCK PLUS DISCRETE WIRE CABLE ASSEMBLIES



Micro-Lock Plus Cable Assembly offers 1.25mm-pitch form factor and carries 1.5A with positive lock

Secures mating retention without sacrificing compactness

OTS MICRO-LOCK PLUS 2.00MM DISCRETE WIRE CABLE ASSEMBLY



OTS Micro-Lock Plus 2.0 Discrete SR Cable Assembly offers a 2.00mm pitch in single-row, off-the-shelf Tin-plated solution with a variety of cable lengths

Delivers secure mating retention without sacrificing compactness. Facilitates both prototyping and global preproduction

OTS EDGELOCK DISCRETE WIRE CABLE ASSEMBLIES



EdgeLock Discrete Wire Cable Assemblies deliver up to 3.0A of current for wire-to-edge applications in a variety of circuit sizes

Features polarization rib to prevent mismating and dual cantilever crimp terminal design for long-term electrical reliability

OTS MICRO-ONE DISCRETE WIRE CABLE ASSEMBLIES



Micro-One Discrete Wire Cable Assemblies deliver up to 4.0A of current for harsh environments and demanding applications

Provides integrated independent secondary lock (ISL) to prevent terminal back-outs and simplify assembly operations

OTS MILLI-GRID DISCRETE WIRE CABLE ASSEMBLIES



OTS Milli-Grid Discrete Wire Cable Assemblies offer a 2.00mm pitch and up to 2.0A of current in dual-row solution with a variety of cable lengths

Delivers blind-mate interface (BMI) capability with a fully shrouded header design for easier installation in confined spaces



NANO-FIT TPA STANDARD
DISCRETE CABLE ASSEMBLIES



Nano-Fit TPA Cable Assembly has up to a 6.5A current rating in a small package

Brings space savings for design flexibility

OTS MICRO TPA CABLE ASSEMBLIES



Micro TPA Cable Assemblies delivers offthe-shelf solutions with a broad offering of Molex connectors and uses popular crimp terminals

Provides ease of design, prototyping and production, meets current cable assembly standards, and ensures availability and wide tooling installation base in market

OTS MICRO-FIT SR OVERMOLDED CABLE ASSEMBLIES



OTS Micro-Fit Single Row Overmolded Cable Assembly delivers an off-the-shelf solution with a variety of cable lengths and a 3.00mm-pitch connector with a 5.6A maximum current rating

Provides quick availability for development and production programs and customized versions for final designs



OTS MINI-LOCK DISCRETE WIRE CABLE ASSEMBLIES



Mini-Lock Discrete Wire Cable Assemblies deliver up to 3.5A of current and a 2.50mm pitch with a variety of circuit sizes

Delivers versatile and proven capability, with terminal position assurance (TPA) and positive lock features available OTS C-GRID III DISCRETE WIRE CABLE ASSEMBLIES



C-Grid III Discrete Wire Cable Assemblies deliver up to 3.0A of current with a variety of circuit sizes

Offers single- and dual-row options with polarization, friction lock and easy breakaway features for design flexibility

KK AND KK PLUS DISCRETE WIRE CABLE ASSEMBLIES



KK and KK Plus Discrete Wire Cable Assemblies deliver up to 11.0A of current with several pitch and wire size options

Delivers extensive wire-to-board and boardto-board versatility with KK Plus high-power connectors and KK low-to-mid-power connectors



MICRO-FIT STANDARD DISCRETE WIRE CABLE ASSEMBLIES



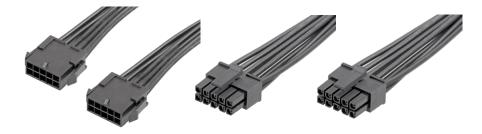
Non-TPA version

TPA version

Micro-Fit TPA Cable Assembly has a maximum 5.0A current rating and a 3.00mm pitch

Delivers a high-density, lower power connection. Reduced terminal back-out

• Micro-Fit 3.0 Cable Assemblies



Micro-Fit 3.0 Cable Assembly delivers a current rating of 6.5 to 8.5A with a 3.00mm pitch in a range of circuits

Delivers a high-density, lower power connection and design flexibility

CLIK-MATE 1.25 STANDARD DISCRETE CABLE ASSEMBLIES



CLIK-Mate Cable Assembly carries 1.0A with a 1.25mm pitch

Offers more signal lines in less space and saves 60% of space than the 2.00mm version

CLIK-MATE 1.5 STANDARD
DISCRETE CABLE ASSEMBLIES



CLIK-Mate Cable Assembly carries 2.5A with a 1.50mm pitch

Offers more signal lines in less space and features the widest variety of choices, including single- and dual-row types, SMT and through-hole versions and a bottomentry option

CLIK-MATE 2.0 STANDARD DISCRETE CABLE ASSEMBLIES



CLIK-Mate Cable Assembly carries 3.0A with a 2.00mm pitch

Offers even more signal lines in less space. Also, provides the highest current carrying capability of 3.0A and 250V.



MINI-FIT TPA2 STANDARD DISCRETE WIRE CABLE ASSEMBLIES



Mini-Fit TPA2 OTS Discrete Wire Cable Assembly capable of carrying 9.0A of power

Provides ideal current rating for many signal and power applications. Reduces terminal back-out. Compatible with standard Mini-Fit Jr. Headers

MINI-FIT JR DR CABLE ASSEMBLIES



OTS Mini-Fit Jr. DR Discrete Wire Cable Assembly delivers an off-the-shelf solution with a variety of cable lengths and a 4.20mm-pitch connector with a 9.0A maximum current rating

Provides design flexibility and high quality. Designed to support development and production programs. Available with Gold or Tin plating.

OTS MINI-FIT SIGMA DR DISCRETE WIRE CABLE ASSEMBLIES

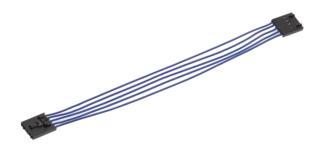


OTS Mini-Fit Sigma DR Tin Discrete Wire Cable Assemblies deliver up to 11.5A of current and offer a variety of circuit sizes

Offers positive locking housings for to help prevent accidental unmating; facilitates both prototyping and global preproduction



SL (POSITIVE LOCK) 2.54MM-PITCH DISCRETE WIRE CABLE ASSEMBLIES



SL (Positive Lock) Discrete Wire Cable Assemblies carry up to 3.0A of power to support a range of wire-to-board applications

Helps ensure secure retention with connector position assurance positive lock feature

STANDARD 0.93" 6.70MM-PITCH DISCRETE WIRE CABLE ASSEMBLIES



Standard .093" Pin-and-Socket Discrete Wire Cable Assemblies deliver up to 17.0A of power with a range of circuit counts and cable lengths available

Includes polarization, keying and positive lock features for reliable operation in a range of medium-power applications

OTS SUPER SABRE DISCRETE WIRE CABLE ASSEMBLIES



Super Sabre Discrete Wire Cable Assemblies carry up to 34.0A of power per blade for use in high-current, highvoltage and high-temperature applications

Delivers design flexibility with low-profile design suitable for temperatures up to +125°C



ULTRA-FIT STANDARD DISCRETE WIRE CABLE ASSEMBLIES



Ultra-Fit OTS Discrete Wire Cable Assembly carries up to 14.0A of power with 17% smaller footprint than similar power connectors

Provides space savings with optimized current destiny

MEGA-FIT STANDARD DISCRETE WIRE CABLE ASSEMBLIES



Mega-Fit OTS Discrete Wire Cable Assembly delivers 23.0A per circuit with a 5.70mm pitch

Offers more power per linear and square millimeter than most midrange power products

OTS DURACLIK ISL SR DISCRETE WIRE CABLE ASSEMBLIES



OTS DuraClik ISL SR Discrete Wire Cable Assemblies deliver up to 3.0A of current and offer a variety of circuit sizes

Offers independent secondary lock (ISL) to detect incomplete terminal insertion; provides up to 50N of terminal retention force; helps position terminals while meeting stringent automotive requirements; Tin plating



IGRID CABLE ASSEMBLIES



iGrid Cable Assemblies deliver off-theshelf solutions with pin-to-pin mapping from receptacle to PCB header and meets current cable assembly industry standards

Provides ready-to-use, plug-and-play connections; ensures high quality and meets current automotive industry standards

OTS POWERWIZE 6.00MM CABLE ASSEMBLIES



Mechanically keyed and color coded with uniquely positioned ribs on header housings and matching slots on receptacles (based on connector color)

Designed to ensure only like-colored connectors mate; helps prevent mis-mating when multiple wire-to-bard or wire-to-busbar interconnects are used in the same application

SW1 CABLES



OTS SW1 Cables deliver solutions with a broad offering of Molex connectors and incorporate COEUR socket technology which enables a high-current-carrying capacity in three sizes: 6.00mm (120.0A), 8.00mm (185.0A) and 11.00mm (300.0A) with a unique positive-locking design for secure mating

Helps ensure minimal contact resistance at the interface between the wire and the crimp barrel; contributes to the system's minimal heat generation in higher-current-carrying capacity compared to other designs



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MULTICAT STANDARD DISCRETE WIRE CABLE ASSEMBLIES



MultiCat Cable Assembly delivers a 10 to 40.0A current rating with connector position assurance (CPA) in a small package

Provides high power and a locking mechanism without sacrificing compactness

KK PLUS 250 DISCRETE WIRE CABLE ASSEMBLIES



KK Plus 250 Cable Assembly offers a 2.50mm pitch and is available in a variety of cable lengths

Facilitates efficient prototyping and global preproduction, while saving time and resources

MINI-FIT MAX CABLE ASSEMBLIES



Mini-Fit Max Cable Assembly offers a 4.20mm pitch and is available in a variety of cable lengths

Supports compact and high-power application demands, for adaptable performance and long-term reliability



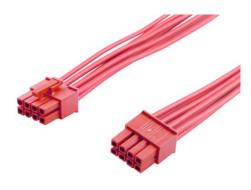
MINI50 CABLE ASSEMBLIES



Mini50 Cable Assemblies deliver 50% space savings over traditional USCAR 0.64mm connector systems

Tested to full USCAR specifications to enhance design flexibility and fit more signals into transportation vehicle interiors

MINI-FIT VERSA CABLE ASSEMBLIES



Mini-Fit Versa Cable Assemblies offer several color options and circuit sizes for adaptable use, accurate mating and ease of assembly

UL 94V-0 Glow Wire combination resin helps reduce expense while allowing customers to meet European electrical standards. Cable assemblies available in red and blue

ULTRAWIZE CABLE ASSEMBLIES





UltraWize Cable Assemblies, specifically engineered for data center applications, support minimal heat generation and high current carrying capacity

The space-saving cable side-exit design eliminates the need to accommodate cable bend radius, for significant space savings and design flexibility



ZERO-HACHI CABLE ASSEMBLIES



Zero-Hachi Cable Assemblies are specifically engineered to address the challenges of shrinking electronic device space availability across industries

The space-saving low profile height and extensive circuit size range combine with an innovative dual-point contact feature to enhance design flexibility and boost reliability

MICRO-FIT+ VERSA CABLE ASSEMBLIES



Micro-Fit+ Versa Cable Assemblies offer a higher current carrying capacity, come in several different colors and are glow wire capable

Specialized design options help enhance flexibility, facilitate operational safety and support efficient assembly

MICRO-FIT 3.0 CABLE ASSEMBLIES



Micro-Fit 3.0 Cable Assemblies support dependable signal or power delivery for space-constrained applications

Specialized design addresses the need for sustained signal or power while accommodating a maximum current rating of 8.5A



OTS MINI-SPOX CABLE ASSEMBLIES



Mini-SPOX Cable Assemblies are ideal for compact applications; these assemblies ensure proper mating orientation and secure mating retention

The wire-to-board connectors system provides electrical and mechanical reliability in a high-temperature design that meets automotive, consumer and industrial industry requirements.

OTS ONEBLADE CABLE ASSEMBLIES



OneBlade Cable Assemblies provide robust and reliable electrical connectivity; these assemblies offer excellent mating retention and versatile design orientations.

This wire-to-board connector system has dual-point contact, friction lock and a singular header design for easy configurations and dependable connections in home appliance and networking applications.

OTS MIZU-P25 DISCRETE WIRE SEALED CABLE ASSEMBLIES



Mizu-P25 Sealed Discrete Wire Cable Assemblies deliver up to 4.0A of current with 2 to 4 circuits in a miniaturized form factor

Designed to meet automotive standards for reliability in harsh environments, Mizu-P25 cable assemblies are vibration-resistant and IP67-rated for superior dust and water protection MX150 DISCRETE WIRE SEALED CABLE ASSEMBLIES



MX150 Sealed Discrete Wire Cable Assemblies deliver up to 22.0A of current for power and signal applications in harsh environments

Features a USCAR interface and spacesaving design for use in applications subject to high vibration and extreme temperatures OTS SQUBA 3.60MM-PITCH DISCRETE WIRE SEALED CABLE ASSEMBLIES



Squba 3.60mm-Pitch Sealed Discrete Wire Cable Assemblies deliver up to 14.0A of current and an IP68 rating for resistance to water or dust ingress

Delivers reliable high-power performance for space-constrained applications subject to wet conditions



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OTS SQUBA 1.80MM-PITCH DISCRETE WIRE SEALED CABLE ASSEMBLIES



Squba 1.80mm-Pitch Sealed Discrete Wire Cable Assemblies deliver up to 6.0A of current and an IP68 rating for resistance to water or dust ingress

Offers miniaturized flexibility for reliable operation in applications subject to water or moisture exposure

OTS MX64 SEALED CABLE ASSEMBLIES



MX64 Cable Assemblies are specifically engineered for USCAR compliance and ideal for rugged automotive applications

The compact design features IP67-rated matte seals, accommodating 18-22 AWG wires and ISO metric wires.

Pre-Crimped Leads

Molex's range of pre-crimped leads offers a simple and cost-effective solution for any pre-production and prototype requirements.

Available for the most popular Molex connector families, the leads are offered in female-to-female and male-to-male configurations and lengths of 75.00 to 600.00mm.



Speed

Pre-crimped and full test cable decreases time to market

Variety

Pre-crimped leads are available in multiple lengths, making them ideal for all prototype and pre-production requirements

Versatility

Leads crimped on both ends for use with wire-to-wire and wireto-board applications

Quality

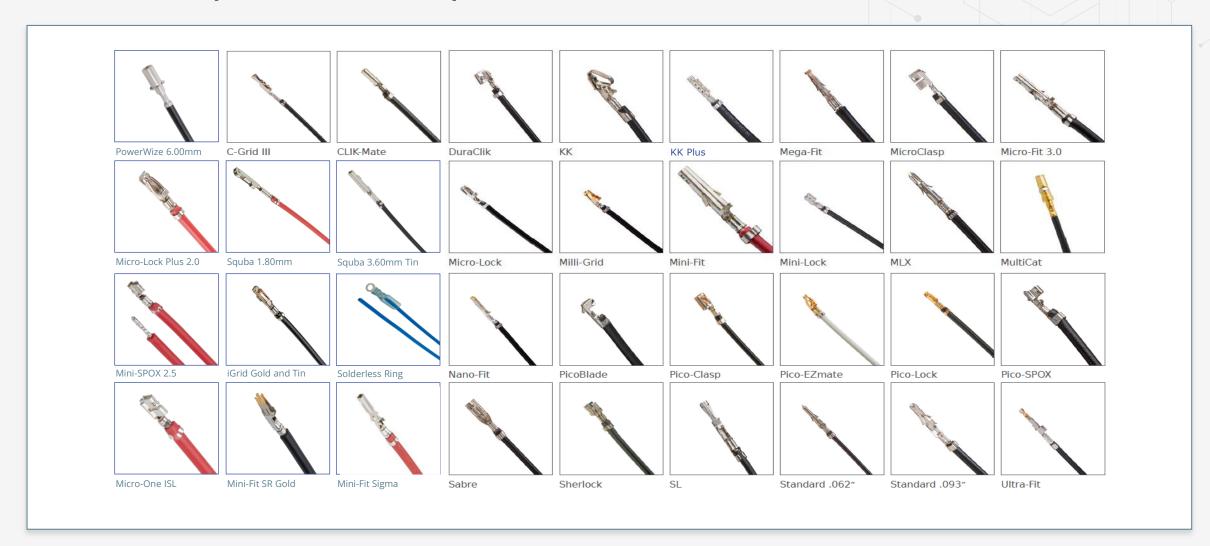
UL-listed cable assures high-quality approved materials

Choice

Pre-crimped leads are available for most popular Molex product families, helping customers choose the right connector before investing in tooling.

OTS Pre-Crimped Leads
Web Overview

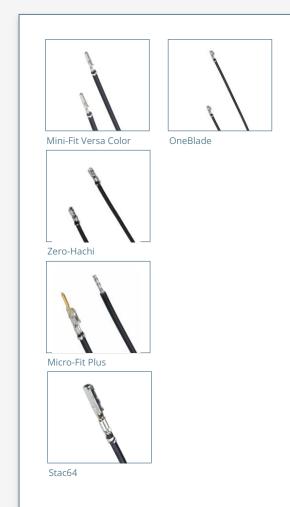
Pre-Crimped Lead Options





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Pre-Crimped Lead Options





Markets and Applications



CONSUMER

- Consumer
- Home entertainment systems
- Home appliances
- Home security systems
- Portable devices
- Gaming consoles
- Mobile devices



COMMERCIAL VEHICLE

- Aviation
- Drones
- Commercial aircraft cabins



INDUSTRIAL AUTOMATION

- Process controls
- Industrial motors



MEDTECH

- Patient monitors
- Diagnostic equipment

Further Information

Datasheets

Off-the-Shelf Discrete Wire Cable Assemblies

Off-the-Shelf Pre-Crimped Leads

Web Overview

Off-the-Shelf Cable Assemblies

Off-the-Shelf Pre-Crimped Leads

Brochure





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