

Standard Discrete Cable Assemblies deliver off-the-shelf (OTS) solutions with a broad offering of Molex connectors and a variety of cable lengths to facilitate both prototyping and global production

Features and Benefits

Custom assemblies for production also available

Meet design needs after prototyping is complete. Molex's extensive design and manufacturing expertise can meet the unique challenges of the most demanding applications



PicoBlade Standard Discrete Wire Cable Assembly

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



Mini-Fit Jr. Standard Discrete Cable Assemblies

Mini-Fit TPA2 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



Micro-Fit Standard Discrete Wire Cable Assembly

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



Ultra-Fit Standard Discrete Cable Assemblies

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

Provides space savings with optimized current desnity



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



CLIK-Mate Standard Discrete Cable Assemblies

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

Offers more signal lines in less space



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



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



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

Ideal for applications requiring space savings and secure mating retention

molex

UL 1061 discrete wires for micro cable assemblies; UL 1007 discrete wires for other assemblies

Ready to use in electronic appliance applications. Provide ease of design, prototyping and production



PicoBlade Cable Assembly



Nano-Fit TPA Cable Assembly

Multi-color cable configurations with Ultra-Fit TPA, Micro-Fit TPA and Mini-Fit TPA2 Connectors available off the shelf

Designed to support development and production programs. Multi-color cables ensure correct connection



MicroClasp Cable Assembly



Pico-Clasp Cable Assembly



Ultra-Fit TPA Cable Assembly

Meets 2011/65/EU RoHS Compliance

Decreases engineering time and resources

Assembled in ISO/TS16949-certified facilities

Ensures high quality. Meets current automotive industry standards



Micro-Fit TPA Cable Assembly



Mini-Fit TPA2 Cable Assembly

Applications

Consumer

Fitness equipment

Home entertainment systems

Home appliances

Home office

Home security systems

Portable electronic devices

Gaming consoles

Mobile devices

Commercial Vehicle

Industrial

Process controls

Medical

Patient monitors



CLIK-Mate Cable Assembly

Pin-to-pin mapping from receptacle to PCB header

Provides ready-to-use, plug-and-play connections



Pico-Lock Cable Assembly



Gaming Machines



Office Equipment



Industrial Automation



Specifications

Pico-Clasp Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

Packaging: 50 or 100 SPQ CABLE UL File No.: UL1061

Mates With: Series 53261, 53047, 53398, 53048

Designed In: Millimeters

RoHS: Yes Halogen Free: No Glow Wire Compliant: No

ELECTRICAL

Voltage (max.): 125V Current (max.): 1.0A

Contact Resistance: 20 millihoms Dielectric Withstanding Voltage: 250V AC Insulation Resistance: 100 Megohms

MECHANICAL

Contact Insertion Force (max.): 4.9N Contact Retention to Housing (min.): 4.9N Mating Force: See PS51021-001 Unmating Force: See PS51021-001

PHYSICAL

Housing: See PS51021-001 Contact: See PS51021-001

Plating:

Contact Area — Tin Solder Tail Area — Tin Underplating — Tin

Operating Temperature: -40 to +85°C

Pico-Lock Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

Packaging: 50 or 100 SPQ CABLE UL File No.: UL1061 Designed In: Millimeters

RoHS: Yes

Halogen Free: Low Halogen

ELECTRICAL

Voltage (max.): 150V Current (max.):

Contact Resistance (max.): 20 millihoms Dielectric Withstanding Voltage: 500V AC/1 minute Insulation Resistance (min.): 100 Megohms

MECHANICAL

Contact Insertion Force (max.): 5N (1.00mm) 10N

(1.5mm)

Mating Force (min.): 30 Cycles

PHYSICAL

Housing: Nylon UL 94V-0 Contact: Copper Alloy

Plating:

Contact Area — Gold Underplating — Nickel

Operating Temperature: -25 to +85°C

PicoBlade Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

Packaging: 50 or 100 SPQ CABLE UL File No.: UL1061

Mates With: Series 53261, 53047, 53398, 53048

Designed In: Millimeters

RoHS: Yes Halogen Free: No Glow Wire Compliant: No

ELECTRICAL

Voltage (max.): 50V Current (max.): 1.0A

Contact Resistance: 20 millihoms

Dielectric Withstanding Voltage: 250V AC/1 minute Insulation Resistance (min.): 100 Megohms

MECHANICAL

Contact Insertion Force (max.): 4.9N

Mating Force: 30 Cycles

PHYSICAL

Housing: Nylon UL 94V-0 Contact: Phosphor Bronze

Plating:

Contact Area — Gold Underplating — Nickel

Operating Temperature: -40 to +85°C

CLIK-Mate Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

UL File No.: E29179

Mates With: Pico-Clasp Headers mate with Pico-

Clasp Receptacles

Use with: 501334 and 501193 Crimp Terminals

Designed In: Millimeters

RoHS: Yes Halogen Free: Yes

ELECTRICAL

Voltage (max.): 100V AC/DC Current (max.): 2.0A

Contact Resistance (max.): 20 milliohms

Dielectric Withstanding Voltage: 500V AC/1 minute Insulation Resistance (min.): 500 Megohms

MECHANICAL

Durability: 30 Cycles

PHYSICAL

Housing:

Housing: High-temperature material

Contact: Copper Alloy

Plating:

Contact Area — Tin/Gold Solder Tail Area — Tin Underplating — Nickel

Operating Temperature: -25 to +85°C



Specifications

MicroClasp Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

Mates With: MicroClasp Headers (Series 55932,

55935)

Use with: Series 56134 Terminals

Designed In: Millimeters

RoHS: Yes

Halogen Free: Low Halogen

ELECTRICAL

Current (max.): 3.0A

MECHANICAL

Durability: 30 Cycles

PHYSICAL

Housing: Nylon

Contact: Copper Nickel Silicon

Plating:

Contact Area - Tin

Operating Temperature: -25 to +85°C

Nano-Fit TPA Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

UL File No.: E29179 CSA File No.: LR19980 IEC File No.: Pending

Mates With: Nano-Fit Connectors and Receptacles

only — no competitive cross Terminal Used: Nano-Fit Designed In: Millimeters

RoHS: Yes Halogen Free: Yes Glow-Wire Compliant: No

ELECTRICAL

Voltage (max.): 300V Current (max.): 6.5A Contact Resistance (max.): 10 milliohms change over life Dielectric Withstanding Voltage: 1600V Insulation Resistance (min.): 1000 Megohms

MECHANICAL

Mating Force: 3N Unmating Force: 3N

Durability (min.): 20 tin, 50 gold

PHYSICAL

Housing:

Receptacle: Nylon UL 94V-0 Header: LCP UL 94V-0

Contact: Brass Plating:

Contact Area — Tin or 381μ (15μ) Gold or 762μ

(30µ") Gold

Solder Tail Area — Tin Underplating — Nickel

Operating Temperature: -40 to +115°C

Micro-Fit TPA Standard Discrete Wire Cable Assemblies

ELECTRICAL

Voltage (max.): 600V Current (max.): 5.0A

MECHANICAL

Contact Insertion Force (max.): 14.7N per contact Contact Retention to Housing (min.): 24.5N Mating Force (max.): 8N per contact

Durability (max.): Typically 30 cycles; refer to product

specifications

PHYSICAL

Housing: Nylon

Operating Temperature: -40 to +105°C

Ultra-Fit TPA Standard Discrete Wire Cable Assemblies

REFERENCE INFORMATION

UL File No.: Connector (E29179), Wire (UL 1007) Mates With: Ultra-Fit Connectors Use With: Ultra-Fit Headers

Designed In: Millimeters

RoHS: Yes Halogen Free: No Glow-Wire Compliant: No

ELECTRICAL

Voltage (max.): 300V Current (max.): 14.0A

MECHANICAL

Contact Insertion Force (max.): 4.5N Per Circuit Contact Retention to Housing (max.): 4.0N per circuit

Mating Force (max.): 8N Per Circuit

Durability (min.): 25

PHYSICAL

Housing: Nylon UL 94V-0 Contact: High-Conductivity Copper

Plating:

Contact Area — Tin Solder Tail Area — Tin Underplating — Nickel

Operating Temperture: -40° to +105°C

Mini-Fit' TPA2 Standard Discrete Wire Cable Assemblies

ELECTRICAL

Voltage (max.): 600V AC/DC Current (max.): 9.0A

Contact Resistance: 10 milliohm change from initial Dielectric Withstanding Voltage: 2200V AC Insulation Resistance: 1000 Megohms

MECHANICAL

Contact Insertion Force: 15N Contact Retention to Housing: 30N

Mating Force: 14.7N Unmating Force: 1.0N

Durability (min.): 100 Cycles (Tin); 250 Cycles (Gold)

PHYSICAL

Flammability: UL 94V-0 Housing: Nylon

Contact: Brass or Phosphor Bronze

Plating: Tin

Operating Temperature: -40 to +105°C



Ordering Information

Off-the-Shelf Discrete Wire Cable Assemblies

Series No.	Component	Туре	Circuits	Length (m)
<u>15131, 15132</u>	Pico-Lock Receptacle	Single	2 to 12	50, 100, 150, 300, 450, 600
<u>15134</u>	PicoBlade Receptacle	Single	2 to 8	50, 100, 150, 300, 450, 600
<u>15133</u>	Pico-Clasp Receptacle	Single	2 to 8	50, 100, 150, 300, 450, 600
<u>15135</u>	CLIK-Mate Receptacle	Single	2 to 8	50, 100, 150, 300, 450, 600
<u>15136</u>	MicroClasp Receptacle	Single	2 to 8	50, 100, 150, 300, 450, 600
<u>45130</u>	Nano-Fit TPA Receptacle	Dual Row	2, 4,6 and 8	150, 300, 1,000
<u>45132</u>	Micro-Fit TPA Receptacle	Dual Row	2, 4,6 and 8	150, 300, 1,000
<u>45135</u>	Mini-Fit TPA2 Receptacle	Dual Row	2, 4,6 and 8	150, 300, 1,000

Ultra-Fit Off-the-Shelf Discrete Wire Cable Assemblies

Series No.	Color	Component	Туре	Circuits	Length (mm)
<u>45133</u>	Black	- Ultra-Fit TPA Receptacle	Duel Days	0.4C and 0	150 200 1 000
<u>45134</u>	White		Dual Row	2, 4,6 and 8	150, 300, 1,000

Custom Product	Description	
Contact Molex	Discrete Wire Cable Assembly Custom lengths and other options	