



Molex's expanded line of DuraClik™ connectors with terminal retainer options provides superior electrical contact reliability, mating retention and space savings compared to competitive versions for high-vibration and high temperature applications. Available now in 2-15 circuits with both tin and gold plating options.

Features and Benefits

Inner positive-lock design	Provides secure mating and space savings; prevents latch breakage from wire tangling
"Click" sound when mated	Audible mating confirmation
Wide solder tabs designed and tested to SAE Automotive vibration standards	Provides secure PCB retention that can withstand upward pull force of 100N (10kgf) to meet automotive vibration requirements
Independent Secondary Lock (ISL) terminal retainer	Provides up to 50N of terminal retention force and helps position terminals while meeting stringent automotive requirements
Terminal Position Assurance (TPA) terminal retainer	Provides up to 20N of terminal retention force, and secures terminal positioning
Enclosed contact design	Protects contact against dust and debris; avoids tangling during harness assembly
Operating temperatures up to 125 degrees C (ISL and TPA versions)	Meet high-level automotive passenger compartment requirements
Open area for direct pick-and-place assembly	Supports automated board placement without the need for Kapton tape
Gold-plated terminal option	Higher durability for repeat mating cycling
Inertia lock (TPA version)	Requires higher insertion force during earlier part of mating in order to help confirm a secure connection

Markets and Applications

Automotive Applications

- Steering wheel
- Wiper/blinker lever
- Shift lever
- Front/back headlights
- Inverter
- Air conditioner



Front/Back Lights



Steering Wheel



Non-Automotive Transportation



Industrial/Factory Automation Equipment

Other Markets

- Electric bicycle
- Truck
- Crane
- Industrial/Factory automation equipment

DuraClik™ 2.00mm Pitch Wire-to-Board Connectors, SMT, Single Row, Positive Lock

DuraClik™ Standard

560085 Female Terminal

56161 Female Terminal

502351 Receptacle Housing

DuraClik™ ISL

560123 Receptacle Housing

560124 Female Terminal

560125 ISL Retainer

DuraClik™ TPA

505151 Receptacle Housing

505152 TPA Retainer

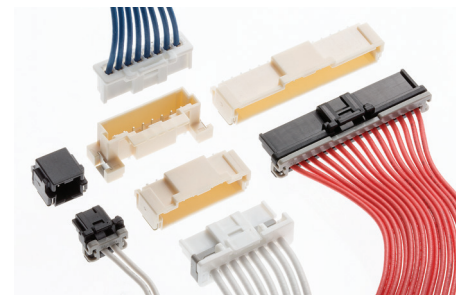
505153 Female Terminal

505487 Female Terminal

DuraClik™ Headers

502352 Right-Angle Header

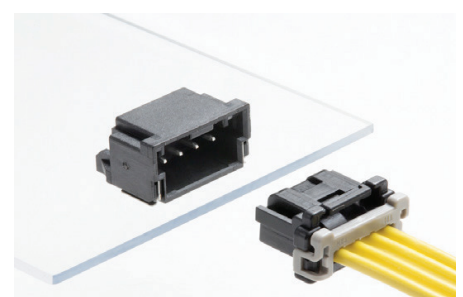
560020 Vertical Header



DuraClik™ Family



DuraClik™ ISL

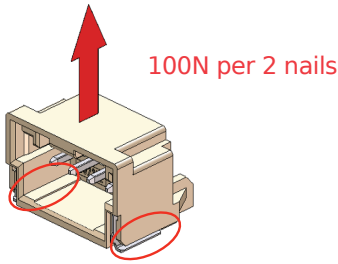


DuraClik™ TPA



Product Features

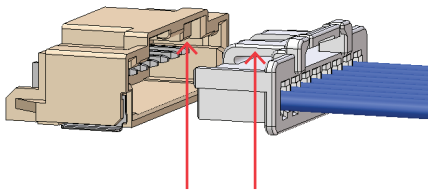
Secure PCB Retention For Anti-Vibration Resistance



Shock-proof SMT design

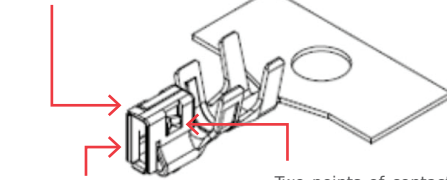
Wide solder tabs (nails) provide secure PCB retention that can withstand upward pull force of 100N (10kgf) to meet automotive anti-vibration requirements.

Inner Positive Lock



Crimp Terminal With Anti-Wire-Tangling Feature

Improved terminal top design prevents damage from wire tangling during shipping and handling



Closed terminal design protects contact against dust and debris.

Two points of contact for secure electrical contact

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505152 TPA Retainer

505153 Female Terminal

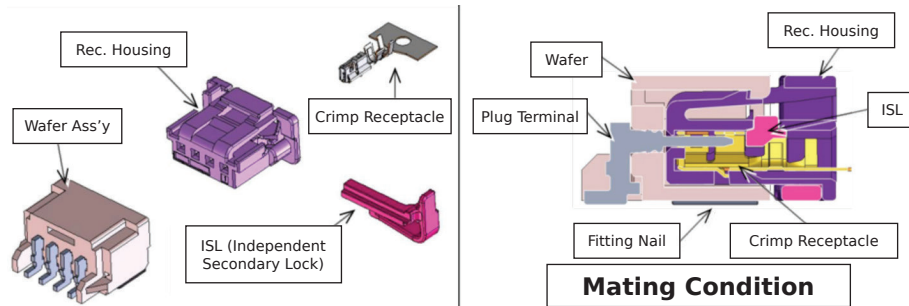
505487 Female Terminal

DuraClik™ Headers

502352 Right-Angle Header

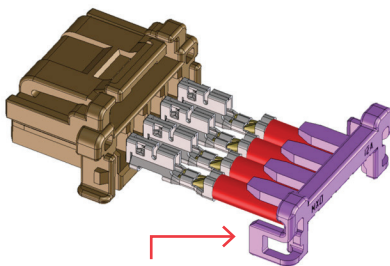
560020 Vertical Header

DuraClik™ ISL

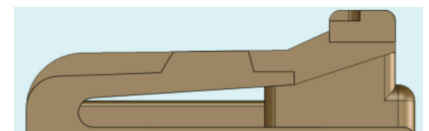
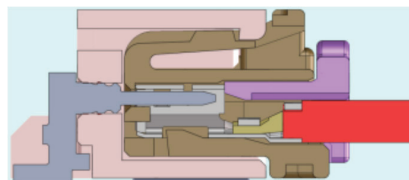


The Independent Secondary Lock (ISL) type terminal retainer provides up to 50N of retention force for superior terminal retention assurance.

DuraClik™ TPA



Retainer



The Terminal Position Assurance (TPA) retainer helps position the terminal and provide up to 20N of terminal retention force.



Specifications

REFERENCE INFORMATION

Packaging: Emboss reel tape
Designed in: mm
RoHS: Yes
Low-Halogen Status: Low-Halogen

ELECTRICAL

Voltage (max.): 125V
Current (max.): 3.0A
Contact Resistance:
10 milliohm max.
Dielectric Withstanding Voltage:
500V AC
Insulation Resistance:
1000 megohm min.

MECHANICAL

Contact Retention to Housing:
Standard Version: 9.8N
TPA Version: 20N
ISL Version: 50N

PHYSICAL

Housings: PBT (TPA type: PA)
Retainers: PBT, Glass-filled
Headers: Polyamide
Terminal Contact: Phosphor Bronze
Header Pin: Copper Alloy
Plating:
Contact Area — Tin or Gold
Solder Tail Area — Tin
Underplating — Nickel
Operating Temperature:
-40 to +105°C (Standard)
-40 to +125°C (ISL and TPA)

Ordering Information

DuraClik™ ISL

Circuit Size	Order Numbers		
	Terminal (Reel)	Retainer (Gray)	Housing (White)
2	560124-0101	560125-0200	560123-0200
3	Tin Plating	560125-0300	560123-0300
	AVSS 0.3mm ²		
4	ISO FLRY-A	560125-0400	560123-0400
	0.35mm ²		
6	560124-0131	560125-0600	560123-0600
8	Gold Plating	560125-0800	560123-0800
	AVSS 0.3mm ²		
10	ISO FLRY-A	560125-1000	560123-1000
	0.35mm ²		

* Other color options available.

DuraClik™ Standard

Circuit Size	Terminal (Reel)	Housing Order Numbers	
		Natural	Black
2	560085-0101 Tin Plating AWG 22-26	502351-0200	502351-0201
3		502351-0300	502351-0301
4		502351-0400	502351-0401
5		502351-0500	502351-0501
6		502351-0600	502351-0601
7		502351-0700	502351-0701
8		502351-0800	502351-0801
9		502351-0900	-
10		502351-1000	-
11		502351-1100	-
12		502351-1200	-
13		502351-1300	-
14		502351-1400	-
15		502351-1500	-

DuraClik™ TPA

Circuit Size	Terminal (Reel)	Order Numbers	
		Retainer (Gray)	Housing (Black)
2	505153-8000 Tin Plating AWG 22, 24	505152-0200	505151-0200
3		505152-0300	505151-0300
4		505152-0400	505151-0400
5		505152-0500	505151-0500
6		505152-0600	505151-0600
7		505152-0700	505151-0700
8		505152-0800	505151-0800
9		505152-0900	505151-0900
10		505152-1000	505151-1000
11		505152-1100	505151-1100
12		505152-1200	505151-1200
13		505152-1300	505151-1300
14		505152-1400	505151-1400
15		505152-1500	505151-1500

Headers

Circuit Size	Right Angle Headers			Vertical Headers	
	Natural, Tin-plated	Black, Tin-plated	Natural, Gold-plated	Natural, Tin-plated	Natural, Gold-plated
2	502352-0200	502352-0201	502352-0210	560020-0220	560020-0230
3	502352-0300	502352-0301	502352-0310	560020-0320	560020-0330
4	502352-0400	502352-0401	502352-0410	560020-0420	560020-0430
5	502352-0500	502352-0501	502352-0510	560020-0520	560020-0530
6	502352-0600	502352-0601	502352-0610	560020-0620	560020-0630
7	502352-0700	502352-0701	502352-0710	560020-0720	560020-0730
8	502352-0800	502352-0801	502352-0810	560020-0820	560020-0830
9	502352-0900	-	502352-0910	560020-0920	560020-0930
10	502352-1000	-	502352-1010	560020-1020	560020-1030
11	502352-1100	-	502352-1110	560020-1120	560020-1130
12	502352-1200	-	502352-1210	560020-1220	560020-1230
13	502352-1300	-	502352-1310	560020-1320	560020-1330
14	502352-1400	-	502352-1410	560020-1420	560020-1430
15	502352-1500	-	502352-1510	560020-1520	560020-1530

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505151 Receptacle Housing
505152 TPA Retainer
505153 Female Terminal
505487 Female Terminal

DuraClik™ Headers

502352 Right-Angle Header
560020 Vertical Header

www.molex.com/link/duraclik.html