

DuraClik 2.00mm Wire-to-Board Connector System >

DuraClik 2.00mm-Pitch Wire-to-Board SMT Connectors provide superior electrical contact reliability, space savings and high PCB retention force capability. These connectors are designed to improve connection security and performance in challenging environments subject to high vibration and high temperatures.









DuraClik Feature	Header	Standard Receptacle	TPA Receptacle	ISL Receptacle
Termination	Surface mount	Crimp	Crimp	Crimp
Size (Depth)	8.00mm (vertical) 9.40mm (right angle)	6.50mm 7.45mm		8.50mm
Current	3.0A	3.0A	3.0A	3.0A
Temperature Rating	-40 to +125°C	-40 to +105°C	-40 to +125°C	-40 to +130°C
Retention Force	-	9.8N	20N	50N
Retainer	-	-	Υ	Υ
Available Circuit Sizes	2 to 15	2 to 15	2 to 15	2 to 10, 12, 13, 15
Plating	Tin, Gold	Tin, Gold	Tin, Gold	Tin, Gold

ADVANTAGES AND FEATURES

Ensures secure connector-to-PCB header retention

Robust secondary lock variants can withstand an upward pull force of 100N (10kgf) to meet automotive vibration requirements.

Confirms correct and secure mating: durability + click (sound) = DuraClik

An audible click sound on mating and built-in inertia lock available in versions up to 15 circuits help ensure a reliable connection.

Offers greater design flexibility

Different header options of 2 to 15 circuits—in vertical and horizontal configurations—are available.

Provides secure mating and space savings; prevents latch breakage from wire tangling An inner positive lock prevents unintended disconnection.

Delivers automotive-grade robustness

The ISL receptacle conforms to LV214 (S2 vibration), ES91500-03 and SAE/ USCAR-21 standards.

Permits use in high-level automotive passenger compartment applications DuraClik's operating temperature range of -40 to +130°C ensures reliability in challenging conditions.



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APPLICATIONS

Automotive

Headlights
Rear combination lamps
Steering switches
Gearshifts
Meter systems
Door modules
Navigation systems
Rearview mirrors
Seat adjusters
Sensors

Electric Vehicle

Battery management systems Inverter fastener components Vehicle connectivity Telematics modules Head-up displays DC-DC converters Onboard chargers Power distribution units

Commercial Vehicle

Tractors
Cranes
Industrial machinery

Consumer

White goods LED lighting Induction cooking heaters Vending/gaming machines Energy storage systems



LED Lighting



Gearshifts



White Goods



Battery Management Systems



Inverters



Induction Cooktops

SPECIFICATIONS

REFERENCE INFORMATION

Packaging:

Header — Embossed tape and reel

Housing, Retainer — Bag

 $\mathsf{Terminal} - \mathsf{Reel}$

Designed In: Millimeters

RoHS: Yes

Low Halogen: Yes

ELECTRICAL

Voltage (max.): 125V Current (max.): 3.0A

Contact Resistance (max.): 10 milliohms Dielectric Withstanding Voltage: 500V AC

Insulation Resistance (min.): 1000 Megohms

MECHANICAL

Contact Retention to Housing: Standard Version — 9.8N

TPA Version — 20N

ISL Version — 50N

Robust Version — 100N

PHYSICAL

Housing: Standard, ISL and Robust: PBT, TPA: PA

Retainer: PBT

Header Housing: Polyamide

Header Terminal: Copper Alloy

Terminal Contact: Phosphor Bronze

Plating:

Contact Area — Tin or Gold

Solder Tail Area — Tin

Underplating — Nickel

Operating Temperature:

-40 to +130°C (ISL)

-40 to +105°C (Standard)

-40 to +125°C (TPA, Robust)



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ORDERING INFORMATION

DuraClik Connectors

Version	Circuits	Housing	Retainer -	Terminal		
				Series	Plating	Wire Gauge
Standard 2 to 15	502351 (natural or black)	-	<u>50212</u>	Tin	30 to 26 AWG	
			<u>560085</u>	Tin	26 to 22 AWG	
			<u>56161</u>	Gold	26 to 22 AWG	
TDA	TPA 2 to 15 (black or white)		505157	<u>505153</u>	Tin	24 and 22 AWG
IPA		(gray)	<u>505487</u>	Gold	24 and 22 AWG	
ISL	2 to 15	560123 (white, black, red, blue)	<u>560125</u> (gray, black)	<u>560124</u>	Tin or Gold	AVSS 0.30mm ² FLRY-A 0.35mm ² Mocar150C 0.35mm ² 0.22mm ²

DuraClik Headers

Version	Circuits	Header Direction	Plating	Color
Standard 2 to 15		<u>502352</u>	Tin	Natural, black, red or blue
	045	(right angle)	Gold	Natural
	2 to 15	560020	Tin	Natural, black, red or blue
		(vertical)	Gold	Natural

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