molex

DuraClik™ connectors with terminal retainer provide high terminal-retention force and the lowest profile design of any similar connector system for automotive applications such as head-and-rear light modules

As LED lighting replaces incandescent-type bulbs in automotive applications, terminal stability and retention are becoming more important. Molex's new DuraClik connectors with terminal retainer provide up to 50N per circuit of retention force to meet new automotive requirements, including ES91500-03 high-retention specification.

The 560123 DuraClik housing accepts a new terminal with retainer that mates with existing DuraClik headers, providing footprint compatibility and design flexibility. Molex's new Independent Secondary Lock (ISL) terminal retainer is inserted easily from the side and provides an extra terminal lock. This feature provides both stability and retention for LED automotive lighting module applications that are subject to high vibration.

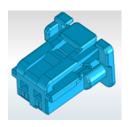
The terminal for the system is made from a special copper alloy that can withstand operating temperatures up to 125°C , to meet the most stringent industry standards while outperforming competitive designs. The housing design also offers a lower profile than similar competitive designs for space savings.

The housing includes a similar inner-lock system as the standard 502351 DuraClik housing to provide space savings, secure mating and latch protection during assembly.

The new terminal-retention version provides automotive customers with a wider option of choices, with the standard DuraClik version suited for onboard instrumentation applications and the terminal-retainer type for more rugged lighting applications.

PRELIMINARY

DuraClik™
2.00mm Pitch
SMT Wireto-Board
Connectors, With
Terminal Retainer







DuraClik™ connectors with Independent Secondary Lock Terminal Retainer

Features and Benefits

Independent Secondary Lock (ISL) terminal retainer	Provides up to 50N terminal retention force to meet stringent automotive requirements
Low mated profile	Offers space savings versus competitive designs
Special copper-alloy terminal	Enables operating temperature up to 125°C
Inner positive-lock design	Space savings and secure mating; prevents latch damage during handling and shipping
Audible click	Provides a tactile sound and feel to operators to assure full mating
Audible click	·

Mates with DuraClik standard headers

Markets and Applications

- > Automotive Applications
 - LED lighting module
 - Steering wheels
 - Shift lever
 - Air conditioning system
 - Meter systems
 - In-Box of inverters

- > Other Markets
 - Truck
 - Crane



Design flexibility

Steering Wheel and Shift Lever



Front/Back Lights



Specifications

REFERENCE INFORMATION

Packaging: Housing (Bag); Terminal

(Reel); Retainer (Bag) Designed in: mm

AWG: 22

RoHS Compliant: Yes Halogen Free: Yes

ELECTRICAL

Current: 3.0A max. Operating Temperature: -40 to +125°C

Product Features

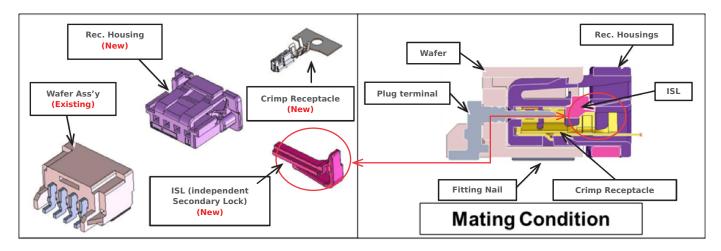
MECHANICAL Housing/Terminal

Retention Force: 50N (5Kgf)

PRELIMINARY

DuraClik™ 2.00mm Pitch **SMT Wire**to-Board **Connectors, With Terminal Retainer**

Independent Secondary Lock Terminal Retainer



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