WireLock®

MORE RELIABILITY LOW MATING **FORCE AUTOMOTIVE GRADE CONNECTOR SYSTEM**

WireLock® is a 1.80mm pitch wire-to-board connector system. It's compact design addresses the growing need for space saving automotive-grade connectors. WireLock® is a double row connector system offering four coding types with different colors.

The connector has nominal current carrying capacity of 3A and supports cable wire gauge from 22AWG to 26AWG. WireLock® is available in 10 to 40 positions in double row with vertical and horizontal TH and SMT configurations.

- USCAR-2 V2 compatible
- Reflow tin plated reduce mating force
- Four different coding with different colors visual mismatching
- Position from 10 to 40
- Terminal Position Assurance (TPA)
- Connector Position Assurance (CPA)



FEATURES

- Reflow Tin plating process for terminal
- Current rating 3A with each contact
- Terminal-Position-Assurance (TPA)
- Four different coding with different colors
- Connector positioning assurance (CPA)
- Wire gauge up to 22AWG

BENEFITS

- Low mating and un-mating force
- Meet higher power Amps performance
- Ensures proper terminal insertion position and retention
- Visual and mechanical mismatching prevention system
- Ensures that connectors are properly mated and locked together
- Meet wide gauge application requirement



TECHNICAL INFORMATION

MATERIAL

• Board Connector: Copper alloy

■ Housing: High Temperature UL 94V-0

Crimping Terminal: Phosphor bronze alloy/bass (tin plated)

ELECTRICAL PERFORMANCE

Voltage Rating: 48V AC/DC

• Insulation Resistance: $100M\Omega$ min.

• Contact Resistance: $25m\Omega$ max. (initial)

• Current Rating: 3A

Low Level Contact Resistance: < 15mΩ
 Dielectric Withstand Voltage: 1000V AC

■ Temperature Rise: +55°C max. for 5.0A

MECHANICAL PERFORMANCE

• Durability: 10 cycles (tin plated)

Mating/Un-mating Force: 75N max.

■ Terminal Insertion Force: <5N max./pin

Terminal Retention Force: 20N min. (before testing).
 40N min. (after testing)

ENVIRONMENTAL

■ Operating Temperature Range: -40°C to +105°C

APPROVALS AND CERTIFICATIONS

- UL E66906

SPECIFICATIONS

■ Product Specification: GS-12-1535

PCB Termination: 1.6mm and 2.0mm

Packaging Specification: GS-14-2668

- Hand Tool Part Number: 10159164-001LF

Application Specification: GS-20-0594

PACKAGING

• PCB Header: Tape and reel or Tray

• Receptacle Housing: Tray

• Crimping Terminal: Reel

TARGET MARKETS/APPLICATIONS



BMS (Battery Management System)
OBC (On Board Charge)

MCU (Micro Control system)

Gateway Lighting

ADAS (Advanced Driving Assistance System)

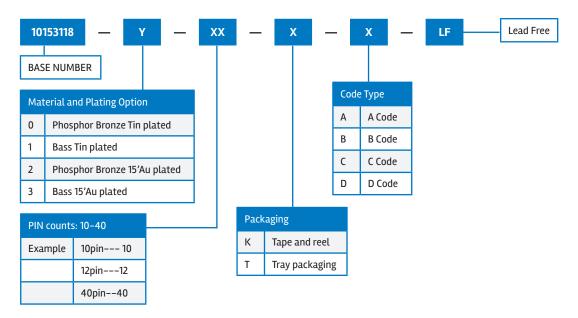
RADAR



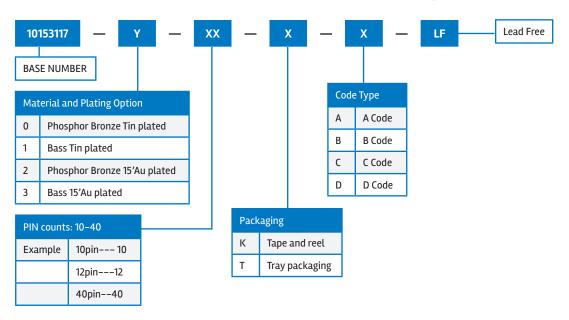
Robotics

► WireLock®

PART NUMBER SELECTOR - DOUBLE ROW R/A_TH HEADER

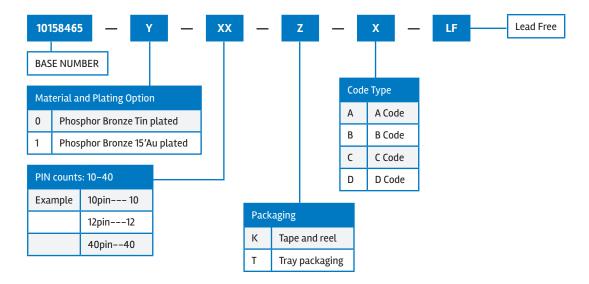


PART NUMBER SELECTOR - DOUBLE ROW R/A_SMT HEADER

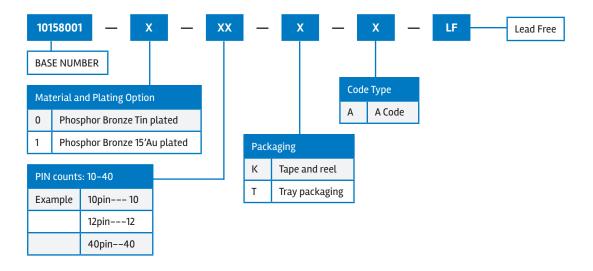


► WireLock®

PART NUMBER SELECTOR - DOUBLE ROW VERTICAL_ TH HEADER

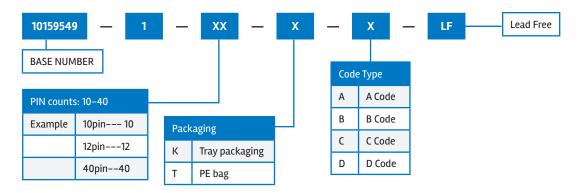


PART NUMBER SELECTOR - DOUBLE ROW VERTICAL_SMT HEADER

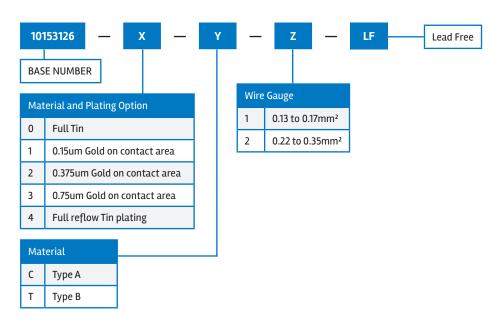




PART NUMBER SELECTOR---RECEPTACLE



PART NUMBER SELECTOR---RECEPTACLE TERMINAL



HAND TOOL

Hand tool part number: 10159164-001LF Application Specification: GS-20-0594