

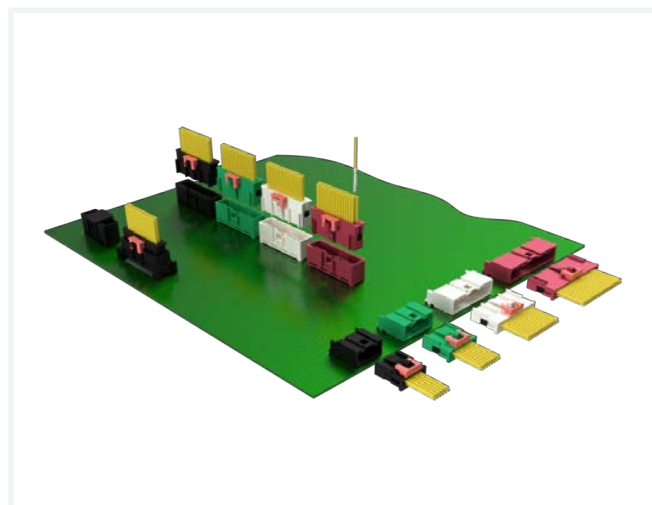
WireLock®

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)



TARGET MARKETS



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 Ω min.
- Contact Resistance: 25m Ω max. (initial)
- Current Rating: 3A
- Low Level Contact Resistance: < 15m Ω
- 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

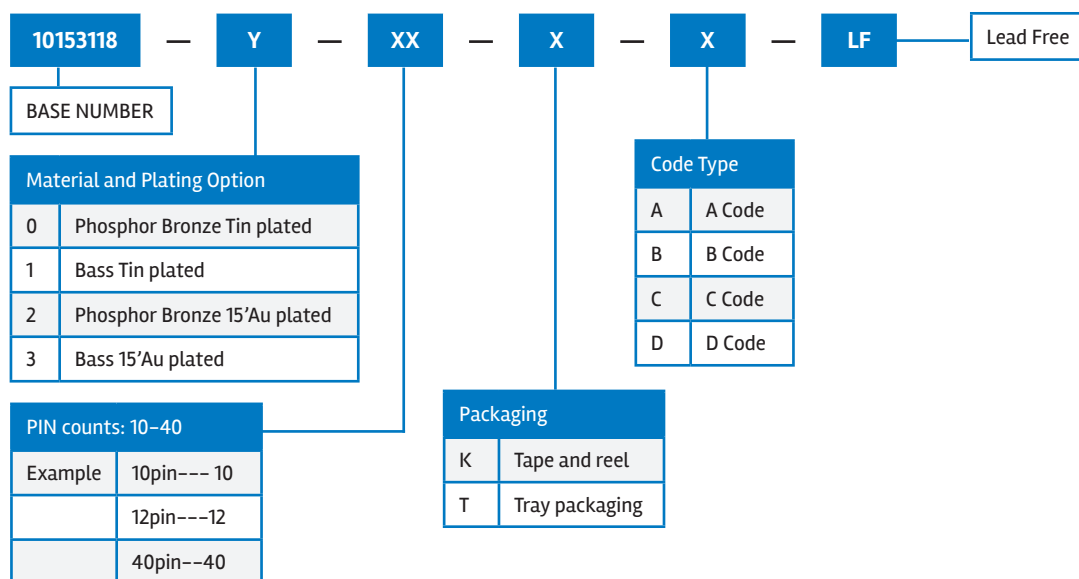


BMS (Battery Management System)
OBC (On Board Charge)
MCU (Micro Control system)
Gateway
Lighting
ADAS (Advanced Driving Assistance System)
RADAR

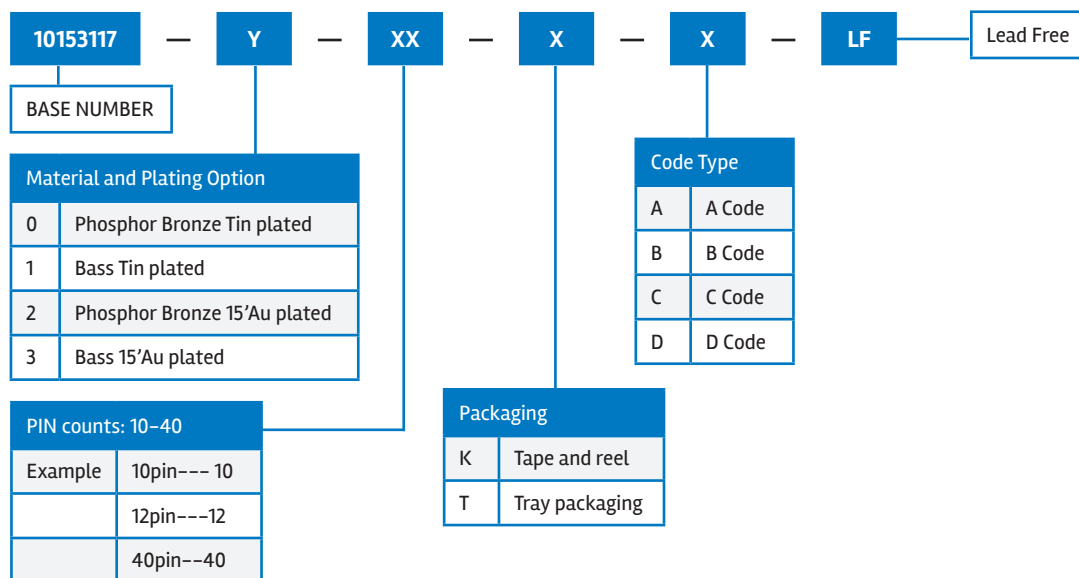


Robotics

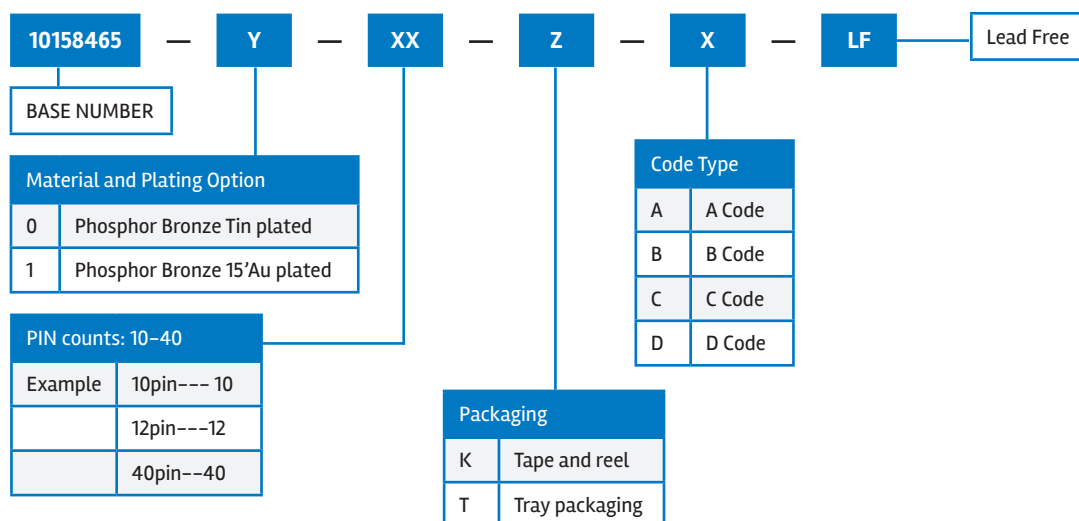
PART NUMBER SELECTOR – DOUBLE ROW R/A_TH HEADER



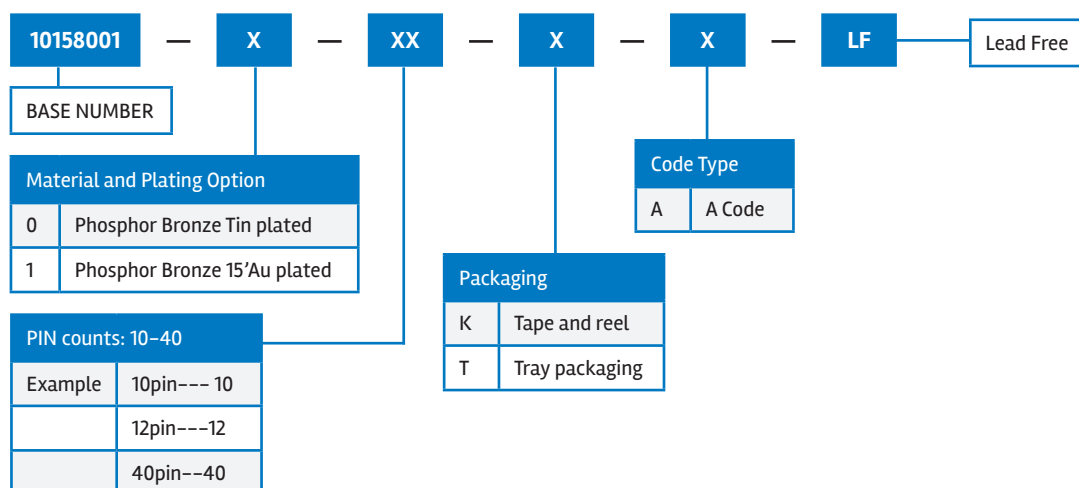
PART NUMBER SELECTOR – DOUBLE ROW R/A_SMT HEADER



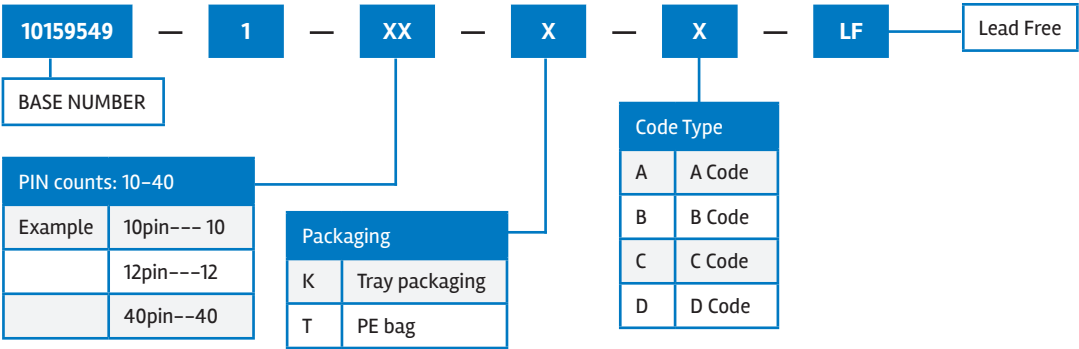
PART NUMBER SELECTOR – DOUBLE ROW VERTICAL_ TH HEADER



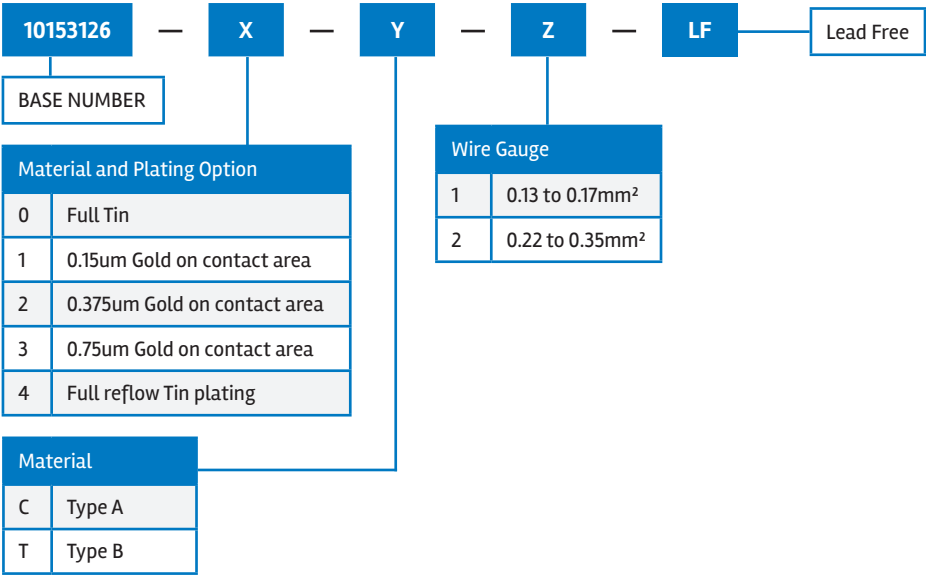
PART NUMBER SELECTOR – DOUBLE ROW VERTICAL_ SMT HEADER



PART NUMBER SELECTOR---RECEPTACLE



PART NUMBER SELECTOR---RECEPTACLE TERMINAL



HAND TOOL

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

FCI / Amphenol:

[10153118-116KALF](#) [10153118-132KALF](#) [10153126-4T2LF](#) [10159549-116KALF](#) [10159549-132KALF](#) [10159549-112KALF](#) [10159549-116KBLF](#) [10159549-116KCLF](#) [10159549-116KDLF](#) [10159549-120KBLF](#) [10159549-120KCLF](#) [10159549-120KDLF](#) [10159549-128KALF](#) [10159549-128KBLF](#) [10159549-128KCLF](#) [10159549-128KDLF](#) [10159549-130KALF](#) [10159549-130KBLF](#) [10159549-132KDLF](#) [10159549-140KALF](#) [10159549-140KBLF](#) [10159549-140KCLF](#) [10159549-140KDLF](#) [10153118-112KALF](#) [10153126-4T1LF](#) [10153118-130KALF](#) [10153118-132KCLF](#) [10153118-132KDLF](#) [10153118-116KCLF](#) [10153118-120KBLF](#) [10153118-128KCLF](#) [10153118-140KCLF](#) [10153118-120KCLF](#) [10153118-116KDLF](#) [10153118-128KDLF](#) [10153118-140KBLF](#) [10153118-130KCLF](#) [10153118-140KDLF](#) [10159549-132KCLF](#) [10159549-130KCLF](#) [10153118-130KBLF](#) [10153118-120KDLF](#) [10153118-128KBLF](#) [10153118-130KDLF](#) [10153118-132KBLF](#) [10153118-116KBLF](#) [10153118-128KALF](#) [10153118-140KALF](#) [10159549-130KDLF](#) [10159549-132KBLF](#)