

WireLock®

MORE RELIABILITY LOW MATING FORCE AUTOMOTIVE GRADE CONNECTOR SYSTEM

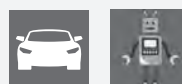
WireLock® is a 1.80mm pitch wire-to-board, flex-to-wire, and wire-to-wire connector system. Its compact design addresses the growing need for space-saving automotive-grade connectors. WireLock® is a double-row connector system offering four coding types with different colors.

The connector has a nominal current carrying capacity of 2A and supports cable wire gauges from 22AWG to 26AWG. WireLock® is available in 10 up to 40 positions in a double row with vertical and horizontal TH and SMT configurations.

- USCAR-T2V2, LV 214 S2 compliant
- Re-flow tin plated reduce mating force
- Four different codings with different colors visual
- Positions from 10 to 40
- Terminal Position Assurance (TPA)
- Connector Position Assurance (CPA)



TARGET MARKETS



FEATURES

- Re-flow Tin plating terminal
- Current rating 2A per each contact
- Terminal-Position-Assurance (TPA)
- Four different codings with different colors
- Connector positioning assurance (CPA)
- Wire gauge from 22AWG to 26AWG

BENEFITS

- Low mating and un-mating force
- Meets higher current performance
- Ensures proper terminal insertion position and retention
- Visual and mechanical mismatching prevention system
- Ensures proper connector mating and locking
- Meet wide gauge application requirement

TECHNICAL INFORMATION

MATERIAL

- Board Connector: Copper alloy
- Housing: High Temperature UL 94V-0
- Crimping Terminal: Phosphor Bronze alloy/brass (tin plated)

ELECTRICAL PERFORMANCE

- Voltage Rating: 12V AC/DC
- Insulation Resistance: 100M Ω min.
- Contact Resistance: 25m Ω max. (initial)
- Current Rating: 2A
- 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

- USCAR T2V2
- LV 214 S2

SPECIFICATIONS

- Product Specification:
 - GS-12-1535 (WtB – USCAR-2)
 - GS-12-1780 (WtB – LV 214 S2)
 - GS-12-1797 (WtW – USCAR-2)
- PCB Termination: 1.6mm and 2.0mm
- Packaging Specification:
 - GS-14-2668 (header)
 - GS-14-2679 (receptacle terminal)
- Hand Tool Part Number: 10159164-001
- Application Specification:
 - GS-20-0594 (WtB)
 - GS-20-0779 (WtW)

PACKAGING

- PCB Header: Tape and reel or Tray
- Receptacle Housing: Tray
- Crimping Terminal: Reel

TARGET MARKETS/APPLICATIONS

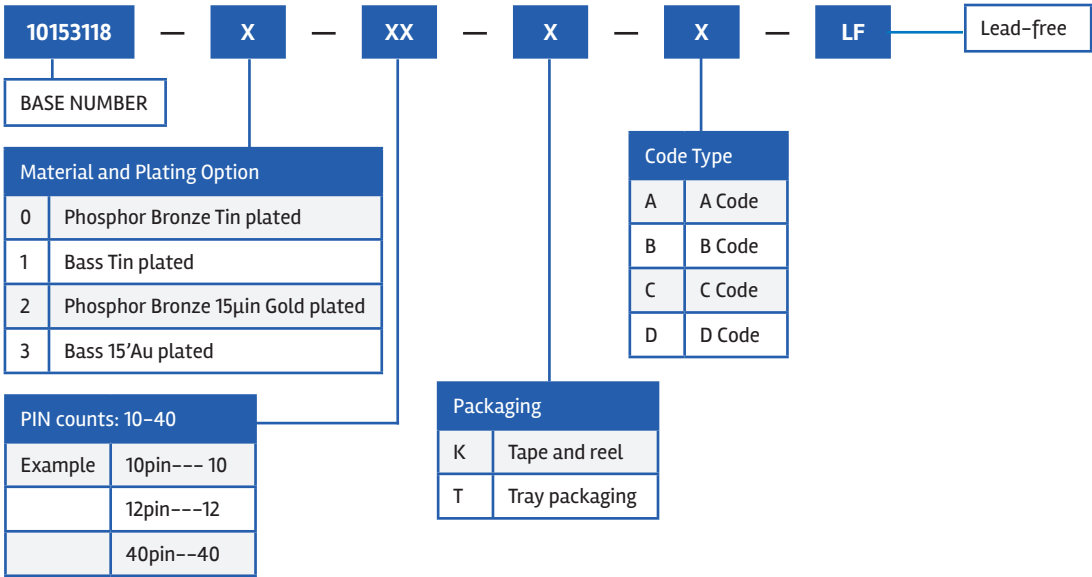


BMS (Battery Management System)
OBC (On Board Charge)
MCU (Micro Control System)
Gateway
Lighting
ADAS (Advanced Driving Assistance System)
RADAR

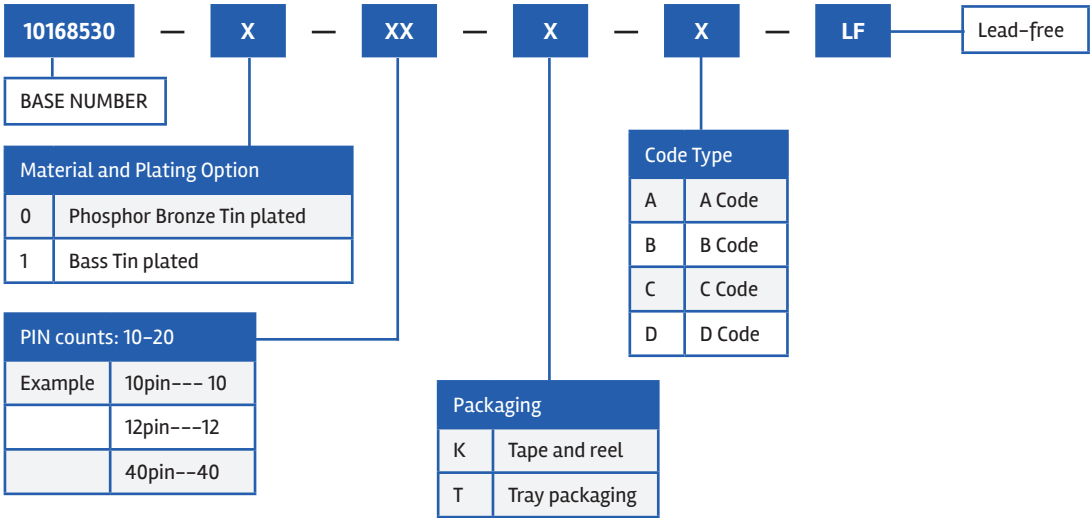


Robotics

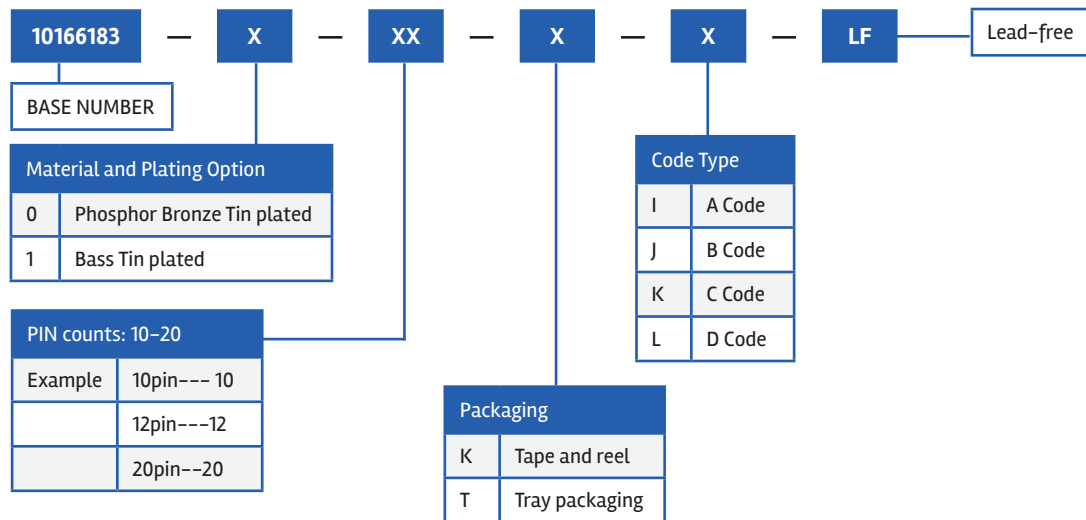
PART NUMBER SELECTOR-DOUBLE ROW R/A-TH-HEADER
(PCB MOUNT)



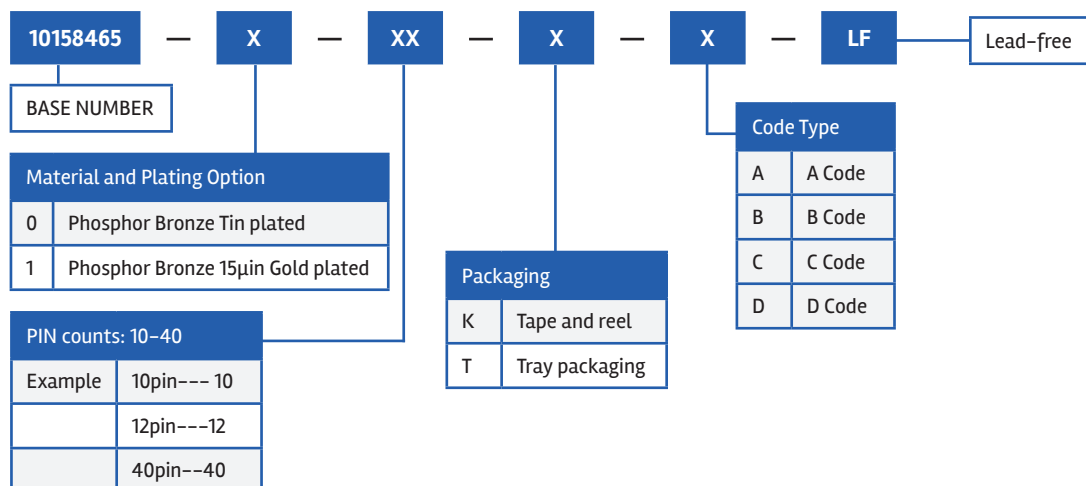
PART NUMBER SELECTOR-DOUBLE ROW R/A-TH-HEADER
(FLEX MOUNT)



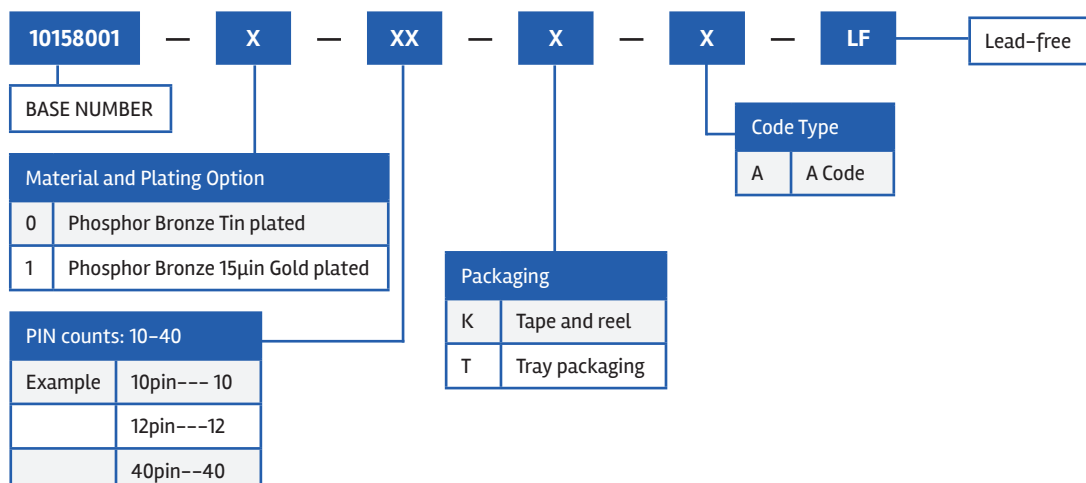
PART NUMBER SELECTOR-DOUBLE ROW R/A-SMT-HEADER (PCB MOUNT)



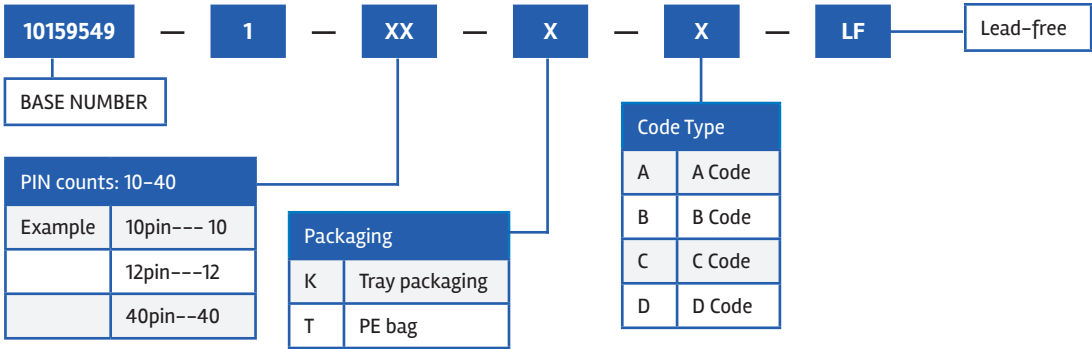
PART NUMBER SELECTOR-DOUBLE ROW VERTICAL-TH-HEADER (PCB MOUNT)



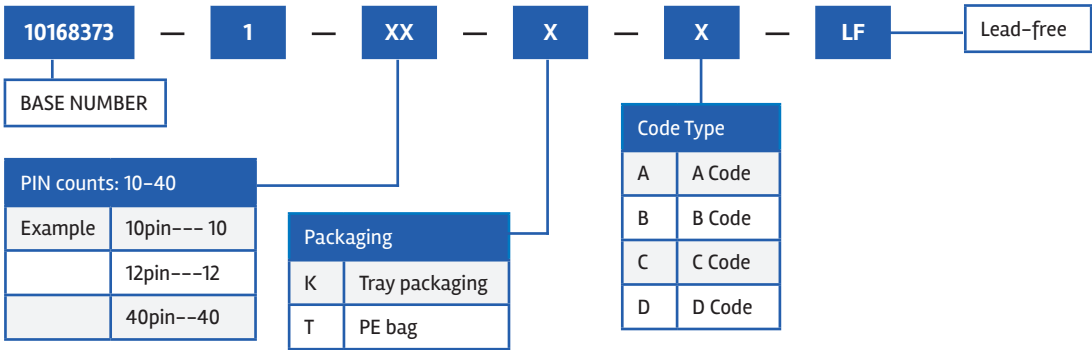
PART NUMBER SELECTOR-DOUBLE ROW VERTICAL-SMT-HEADER (PCB MOUNT)



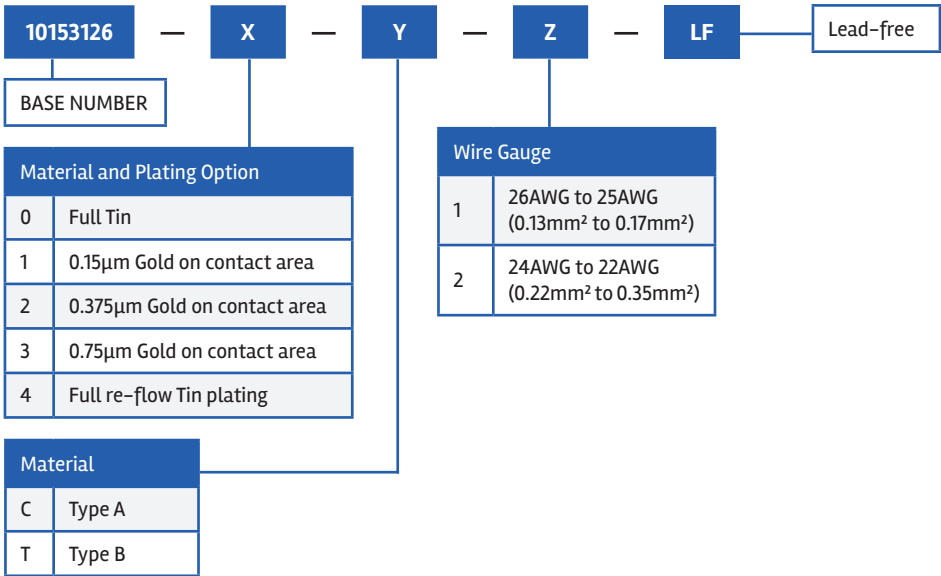
PART NUMBER SELECTOR-RECEPTACLE (USCAR T2V2)



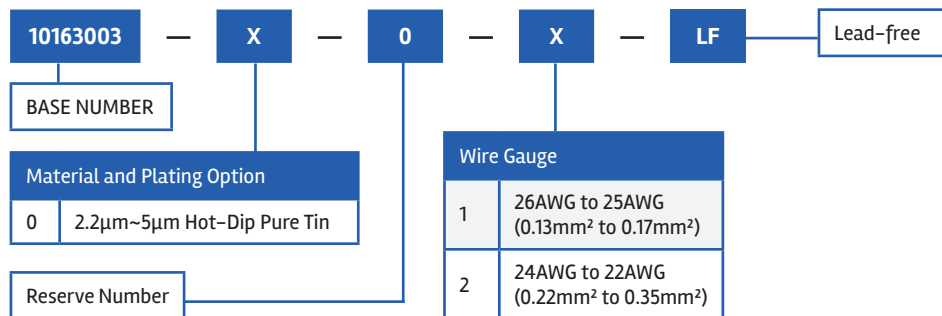
PART NUMBER SELECTOR-RECEPTACLE (LV214 S2)



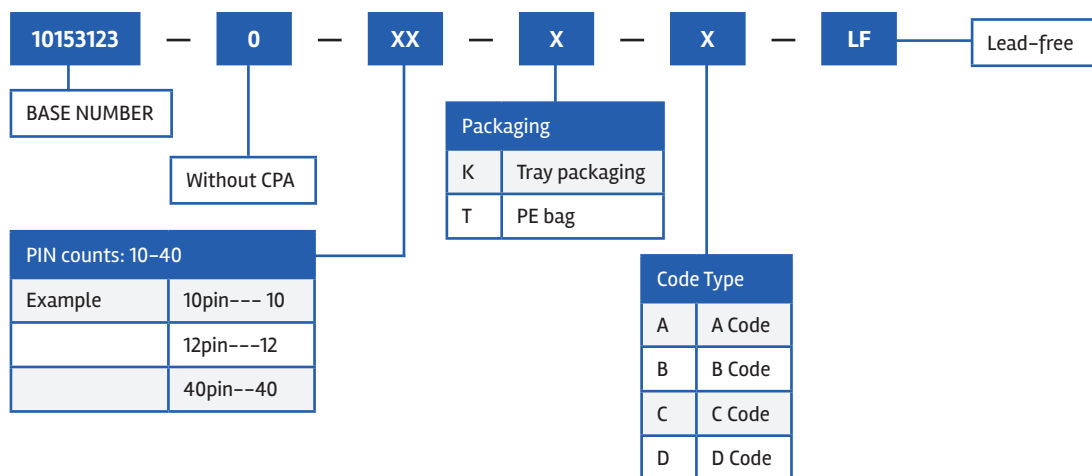
PART NUMBER SELECTOR-RECEPTACLE TERMINAL (USCAR T2V)



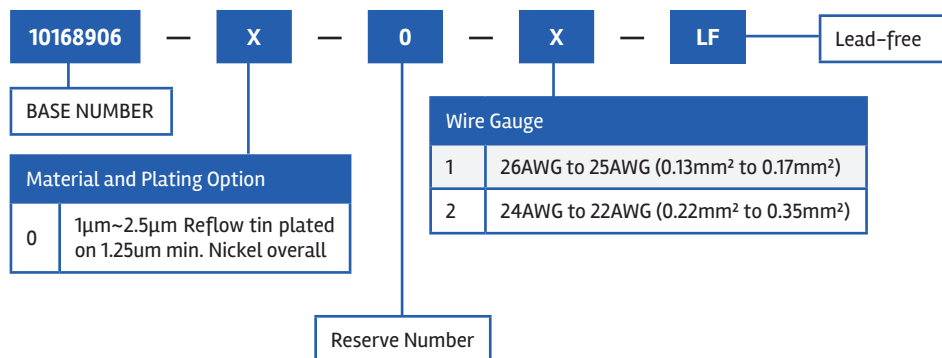
PART NUMBER SELECTOR–RECEPTACLE TERMINAL (LV214 S2/USCAR)



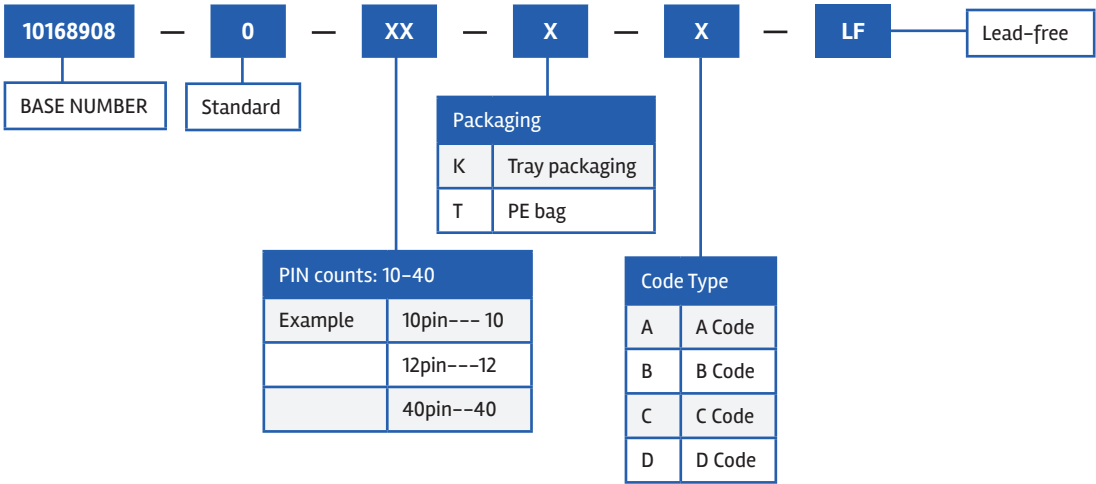
PART NUMBER SELECTOR–RECEPTACLE (USCAR) FOR WTB OR WTW



PART NUMBER SELECTOR–MALE TERMINAL (USCAR) FOR WTW



PART NUMBER SELECTOR–MALE CABLE HOUSING FOR WTW



HAND TOOL

Hand tool part number: 10159164–001
Application Specification:
GS–20–0594 (WtB)
GS–20–0779 (WtW)