

WireLock®

MORE RELIABILITY LOW MATING FORCE AUTOMOTIVE GRADE CONNECTOR SYSTEM

WireLock® is a 1.80mm pitch wire-to-board and flex-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)

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



TARGET MARKETS



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: 12VAC/VDC
- Insulation Resistance: 100M Ω min.
- Contact Resistance: 25m Ω max. (initial)
- Current Rating: 2A
- Low Level Contact Resistance: < 15m Ω
- Dielectric Withstand Voltage: 1000VAC

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)
 - GS-12-1945 (WtB SMT header – USCAR-2)
- PCB Termination: 1.6mm and 2.0mm
- Packaging Specification:
 - GS-14-2668 (header)
 - GS-14-3129 (SMT 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

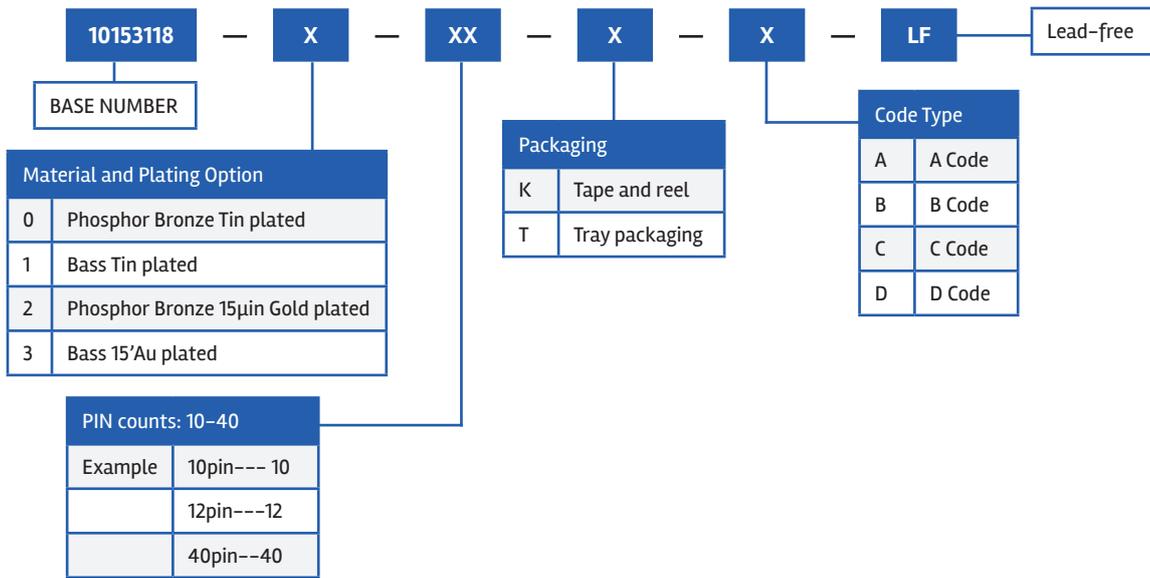


BMS (Battery Management System)
OBC (On-Board Charger)
MCU (Micro Control System)
Gateway
Lighting
ADAS (Advanced Driving Assistance System)
RADAR

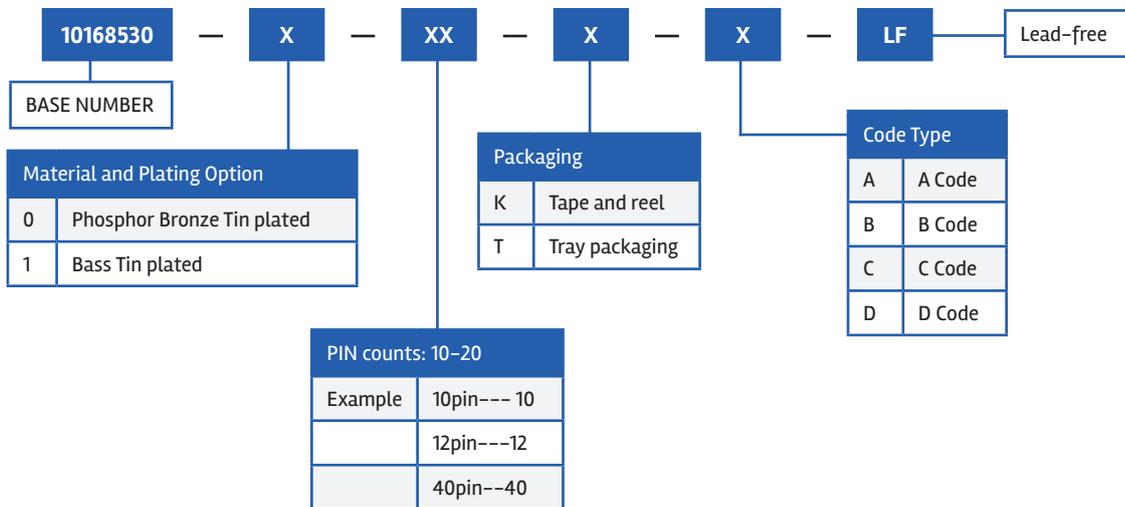


Robotics

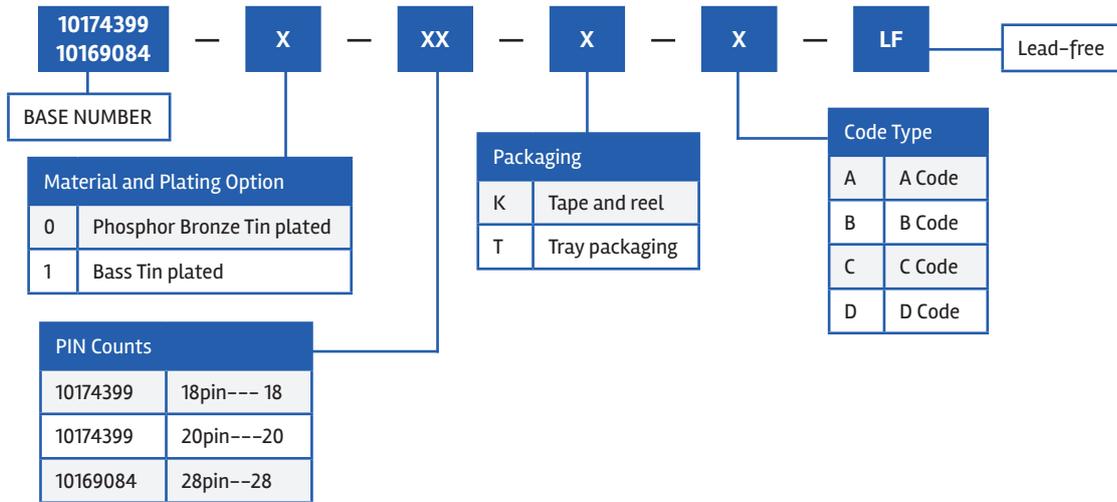
PART NUMBER SELECTOR—DOUBLE ROW R/A-TH-HEADER (PCB MOUNT)



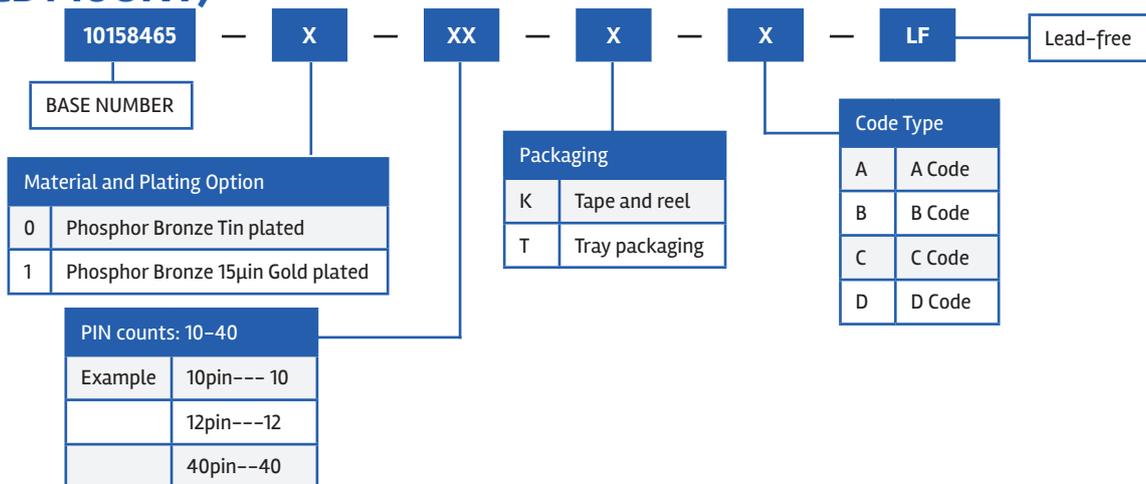
PART NUMBER SELECTOR—DOUBLE ROW R/A-TH-HEADER (FLEX MOUNT)



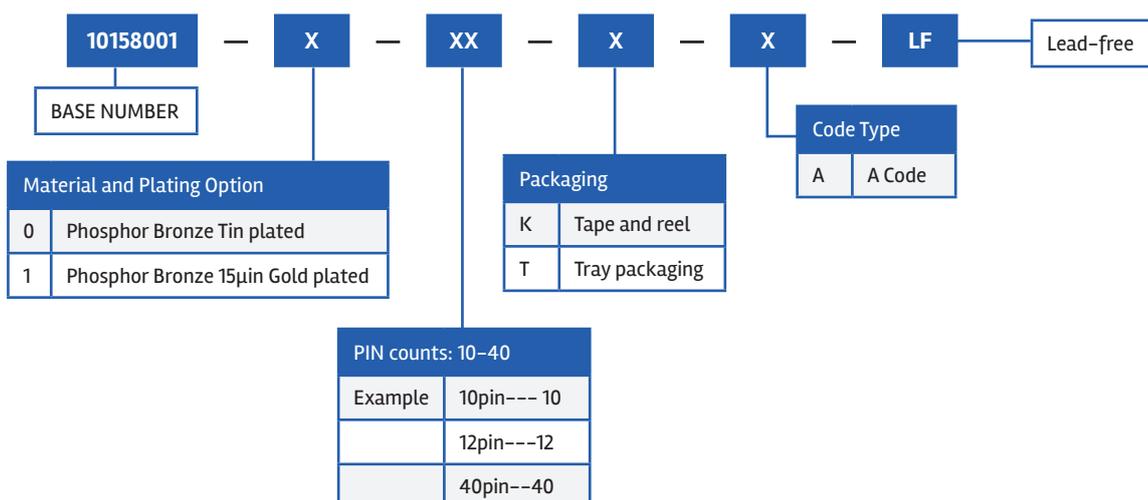
PART NUMBER SELECTOR–DOUBLE ROW R/A–SMT–HEADER (PCB MOUNT)



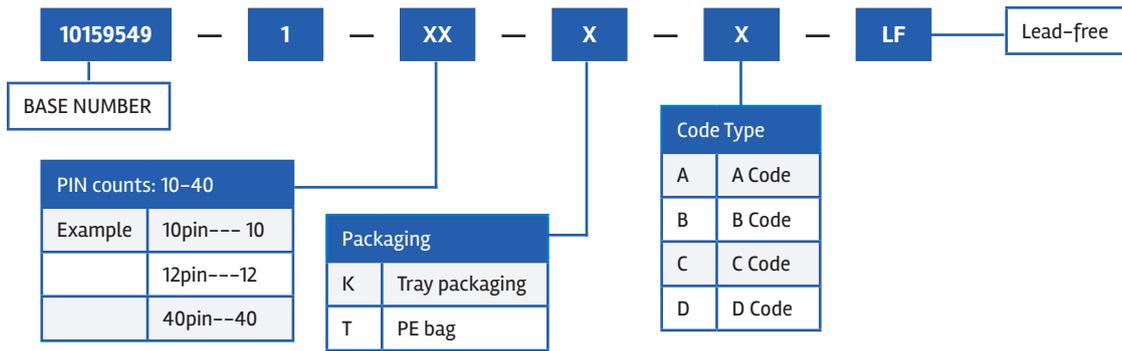
PART NUMBER SELECTOR–DOUBLE ROW VERTICAL–TH–HEADER (PCB MOUNT)



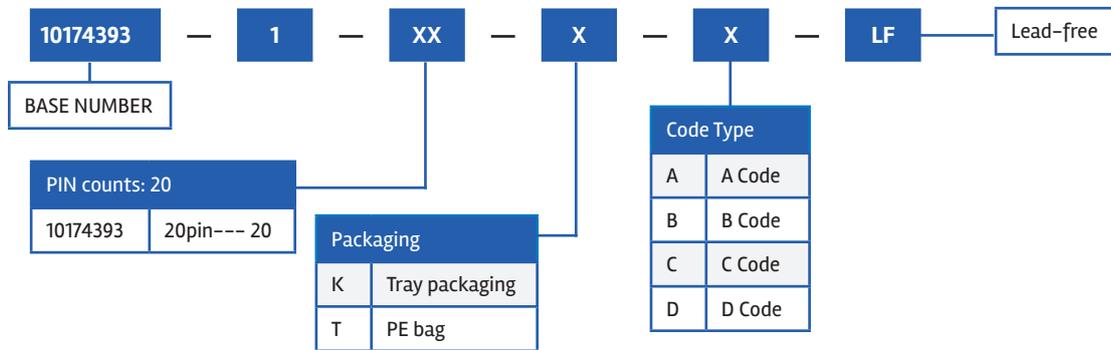
PART NUMBER SELECTOR–DOUBLE ROW VERTICAL–SMT–HEADER (PCB MOUNT)



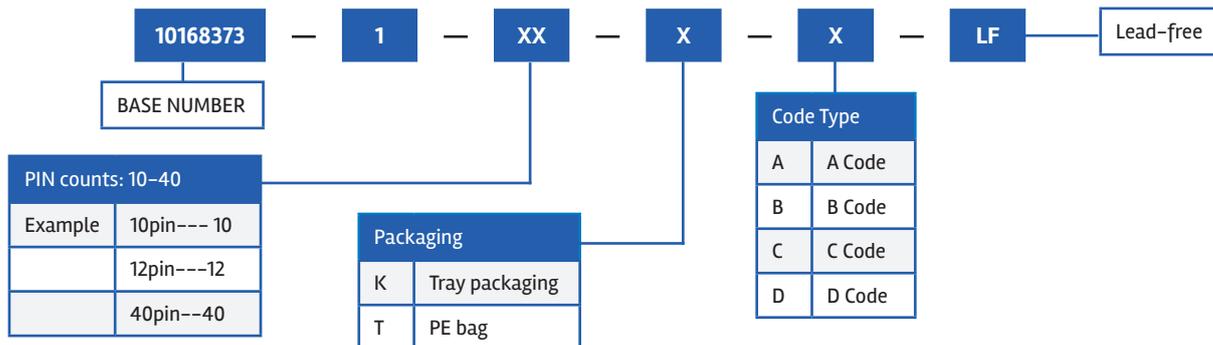
PART NUMBER SELECTOR-RECEPTACLE (USCAR T2V2)



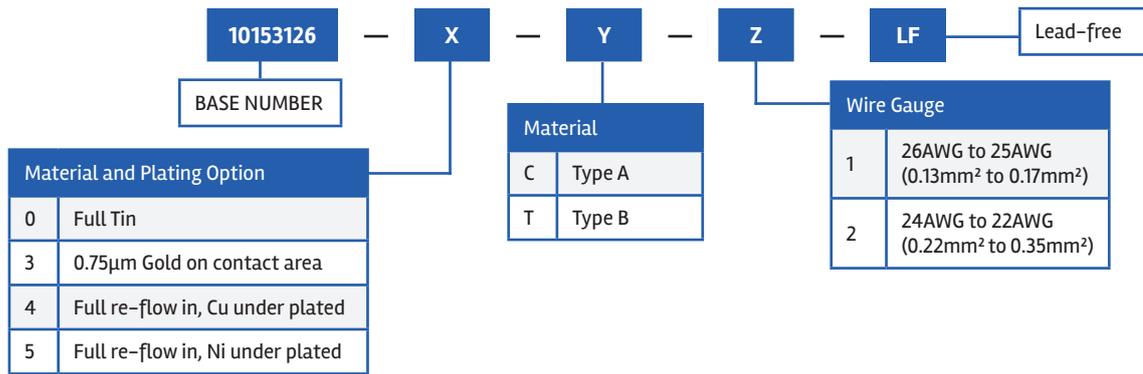
PART NUMBER SELECTOR-RECEPTACLE (USCAR T2V2)



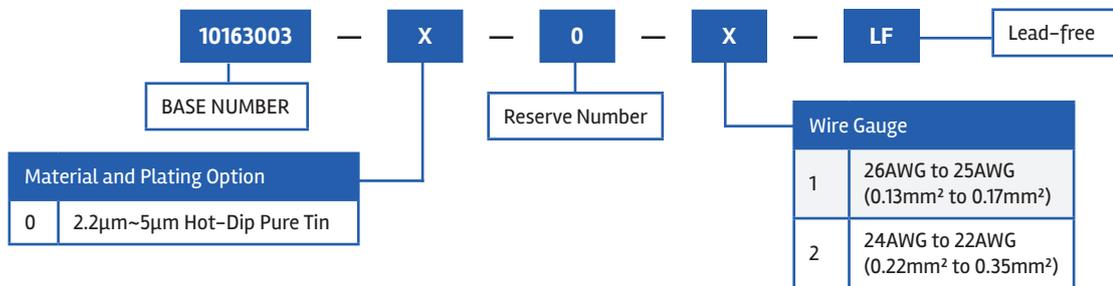
PART NUMBER SELECTOR-RECEPTACLE (LV214 S2)



PART NUMBER SELECTOR—RECEPTACLE TERMINAL (USCAR T2V)



PART NUMBER SELECTOR—RECEPTACLE TERMINAL (LV214 S2)



HAND TOOL

- Hand Tool Part Number: 10159164-001
- Application Specification:
 - GS-20-0594 (WtB)
 - GS-20-0779 (WtW)