

FlexLock® FPC-to-Board

MORE FLEXIBLE SOLDERING AUTOMOTIVE GRADE CONNECTOR SYSTEM

FlexLock® FPC-to-Board connector's compact design address the growing demand for automotive application market. The connector design is compatible to USCAR-T2V2 specifications.

The connector has nominal current carrying capacity of 3A per contact to support higher power application. FlexLock® is available in 10 to 30 positions double row with vertical and horizontal TH and SMT configurations.

- USCAR-T2V2 compatible
- Reflow tin plated reduce mating force
- Position from 10 to 30
- 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)
- Hold down
- Connector Positioning Assurance (CPA)

BENEFITS

- Low mating and un-mating force
- Meet higher power Amps performance
- Ensures proper terminal insertion position and retention
- Increase the board grip force
- Ensures that connectors are properly mated and locked together

TECHNICAL INFORMATION

MATERIAL

- Connector Contact: Copper alloy
- Housing: High temperature UL 94V-0
- Plating: Tin plated
8μ" GXT/Au

ELECTRICAL PERFORMANCE

- Voltage Rating: 48V AC/DC
- Insulation Resistance: 100MΩ min.
- Contact Resistance: 25mΩ max. (initial)
- Current Rating: 3A
- Low Level Contact Resistance: <25mΩ
- Dielectric Withstand Voltage: 500V AC
- Temperature Rise: +55°C max. for 7.32A

MECHANICAL PERFORMANCE

- Durability: 10 cycles (tin), 30 cycles (gold)
- Mating/Un-mating Force: 75N max.
- Terminal Insertion Force: <5N max./pin
- Terminal Retention Force: 15N min.

ENVIRONMENTAL

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

APPROVALS AND CERTIFICATIONS

- UL E66906

SPECIFICATIONS

- Product Specification: GS-12-1679
- PCB termination: 1.60mm
- Packaging Specification: GS-14-2781
- Application Specification: GS-20-0707

PACKAGING

- Header: Tape and reel
- Receptacle Housing: Tray

TARGET MARKETS/APPLICATIONS

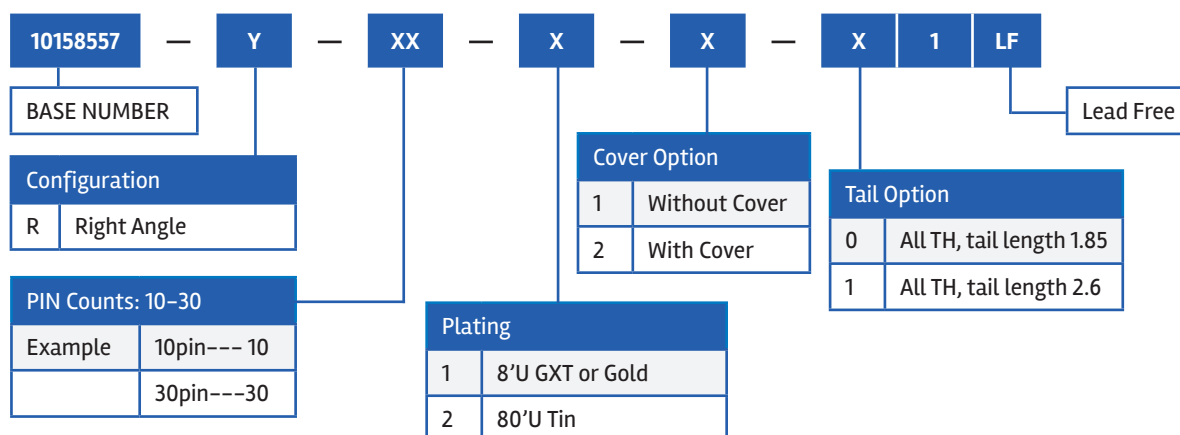


BMS (Battery Management System)
OBC (On Board Charge)
MCU (Micro Control Unit)

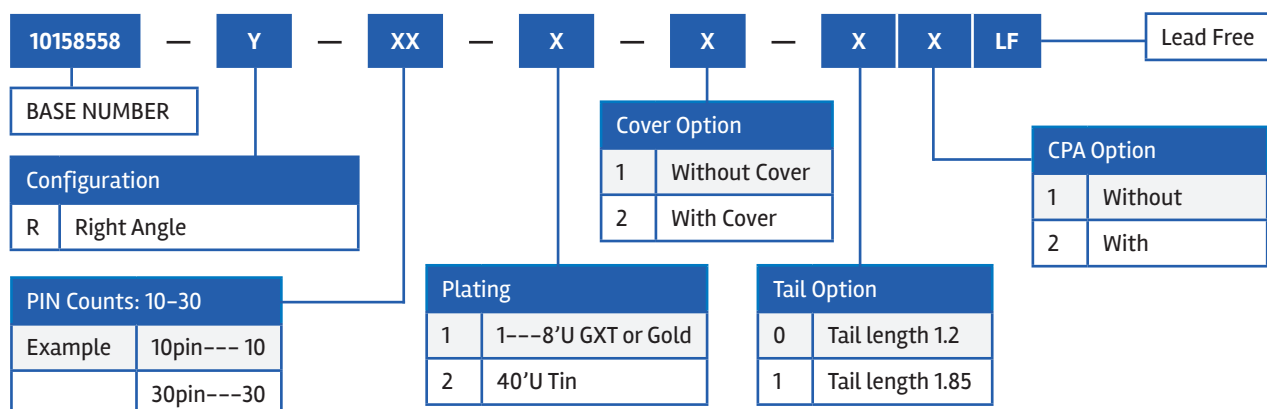


Robotics

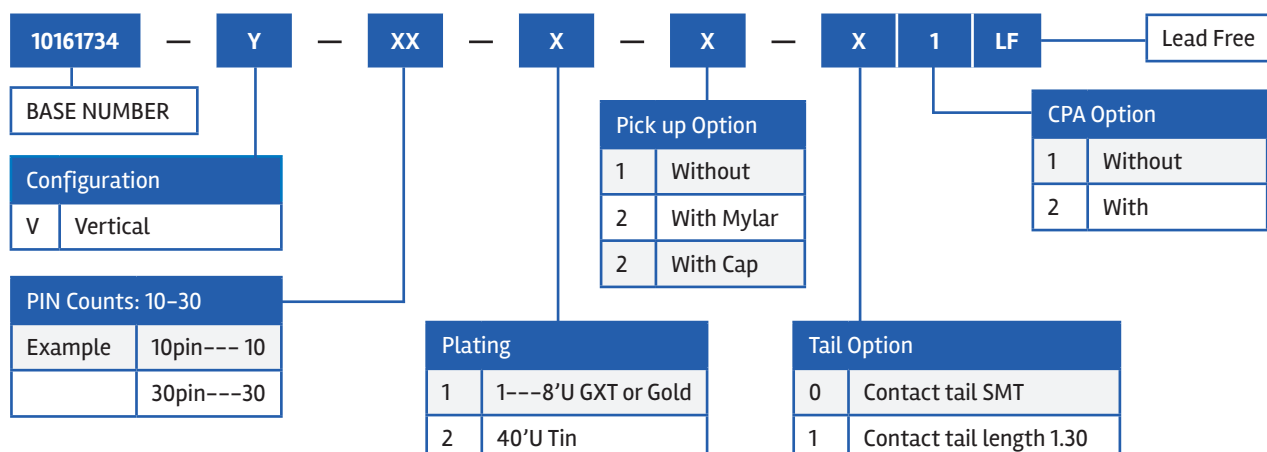
PART NUMBER SELECTOR – DOUBLE ROW R/A_HEADER



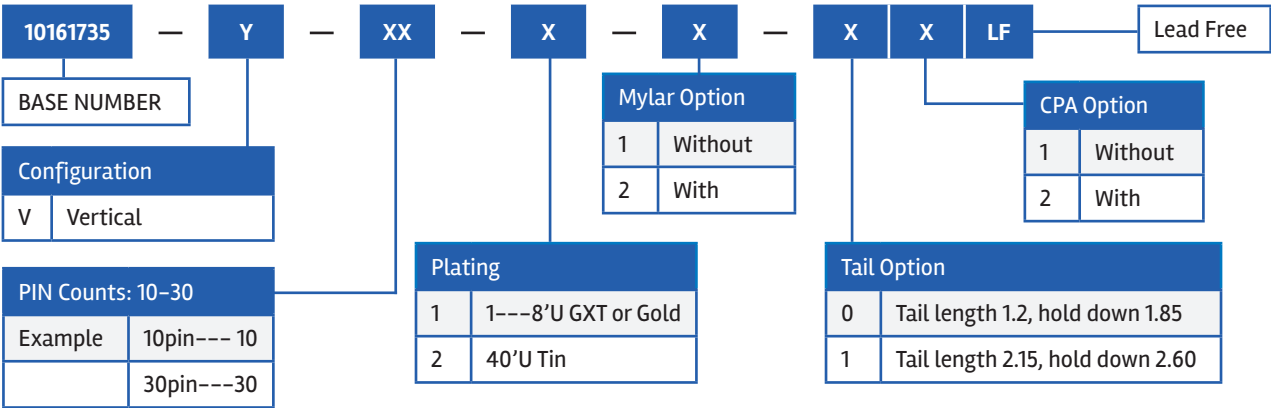
PART NUMBER SELECTOR – DOUBLE ROW R/A_RECEPTACLE



PART NUMBER SELECTOR – DOUBLE ROW VERTICAL_HEADER



PART NUMBER SELECTOR – DOUBLE ROW VERTICAL_RECEPTACLE



PART NUMBERS

Description	Part Numbers
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 30 Position, Top Latch, Tin (preplated)	10158557-R302111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 30 Position, Top Latch, Tin (preplated)	10161735-V302011LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 28 Position, Top Latch, Tin (preplated)	10158557-R282111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 28 Position, Top Latch, Tin (preplated)	10158558-R282111LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Board Header, 12 Position, Top Latch, Tin (preplated)	10158557-R122121LF
FlexLock®, 2.54mm FPC-to-Board Connector Platform, Receptacle, 12 Position, Top Latch, Tin (preplated)	10158558-R122111LF