

# Multi-Ports and Single Port RJ45 Modular Jack Connectors with Selective Gold Plating & LED Color Option

## DESCRIPTION

The FCI's new released Modular Jack Connectors consist of single or multi-port, ganged or stacked types with or without LEDs and shielded or unshielded varieties, mainly in through hole type. They are widely used in Telecom, Data, Networking and Home Entertainment markets for various applications. The new released 19 series features a simple and flexible design within the performance category 3 which supports the transmission of 16Mbps signals targeted to networking and telecommunication equipments. The 19 among the 20 series are designed in 8P8C (P: positions; C: contacts) while 10118065 is the only series by 10P8C, both 8P and 10P connectors have the same width. The ganged modular jack connectors can be specified with shields for effective grounding and improved EMI performance.



## FEATURES & BENEFITS

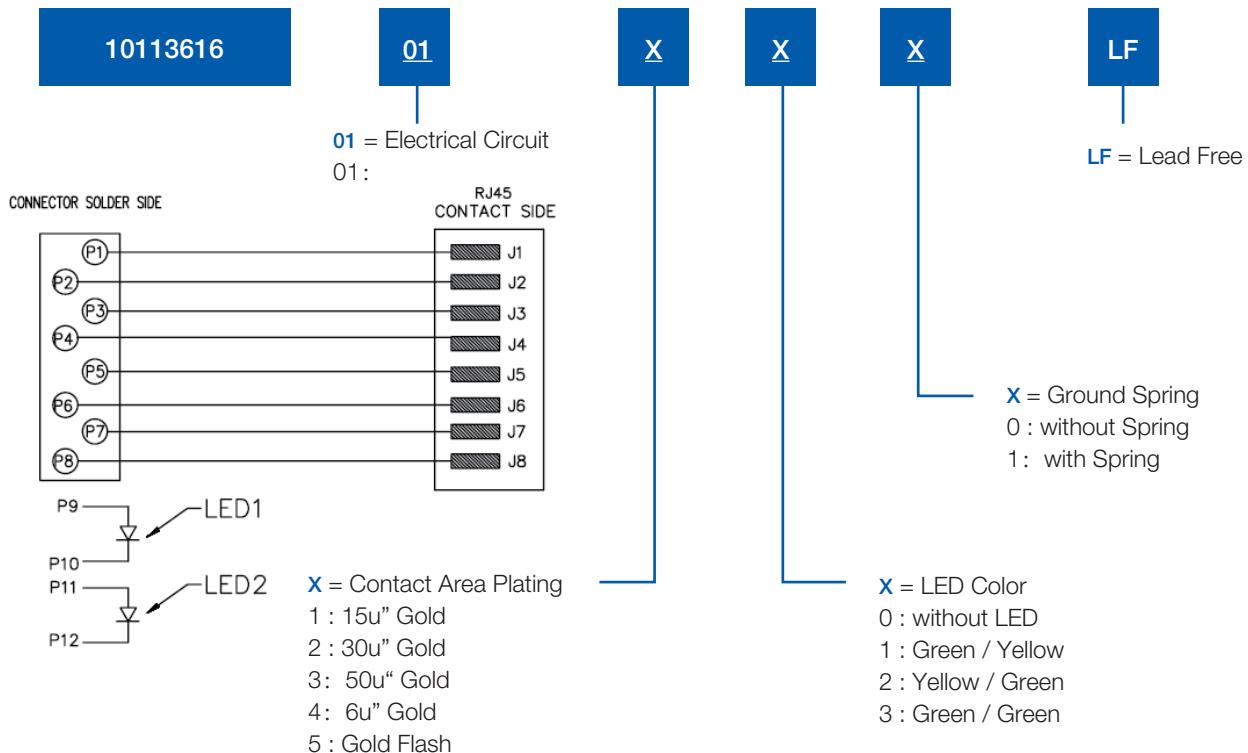
- Right angle
- Through hole type
- Cat 3 performance category
- 8, 10 positions with 8 contacts
- Single & ganged 1xN (1,2,4,6,8) to 2xN (1,2,3,4,6,8) stack multi-ports
- Shield or non-shielded
- Operating temperature: -40°C to 85°C
- Storage temperature: -40°C to 85°C
- Durability: 1,000 cycles for multi-ports and 700 cycles for single port RJ45
- Optional plating type: G/F, 15u", 30u" gold plating
- RoHS compliant per EU Directive 2002/95/EC
- Shield shell for EMI protection
- With or without LED, and optional LED colors
- Tray packaging as general, additional tape & reel packaging for single port series

## TARGET MARKETS & APPLICATIONS

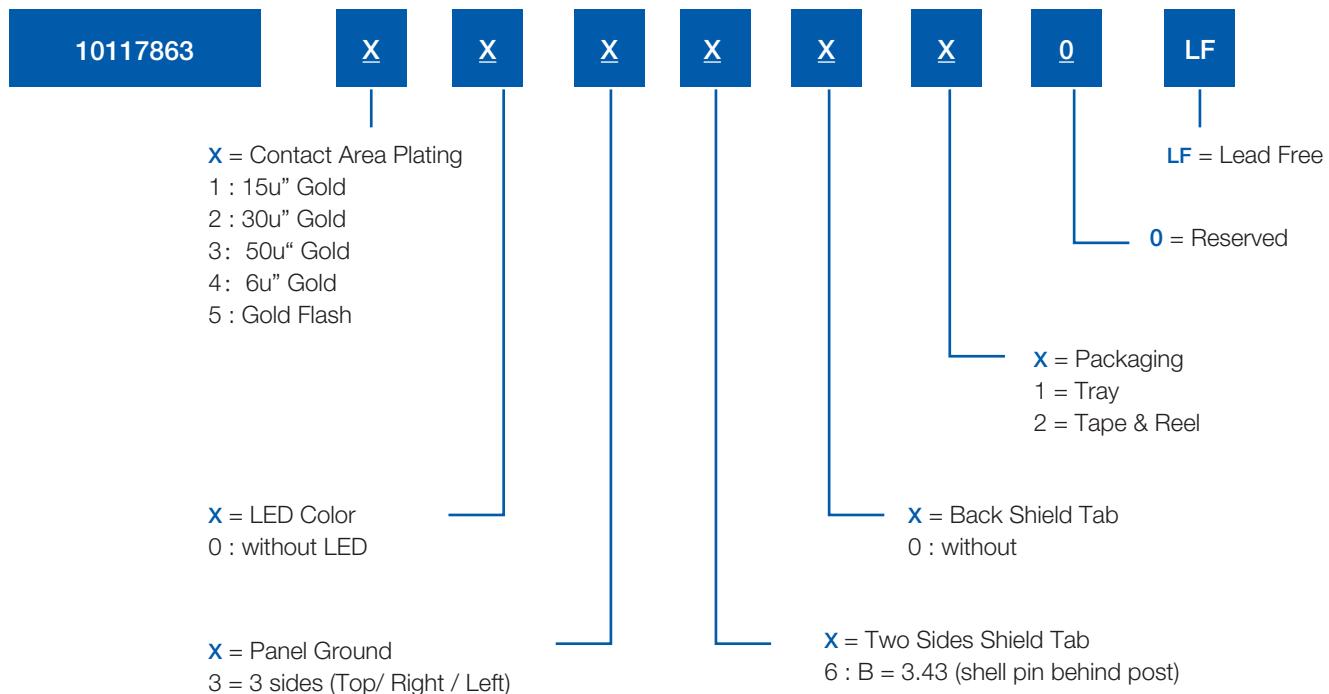
- Target Markets
  - Datacom
  - Networking
  - Industrial
  - Instrumentation & Medical
  - Consumer
- Target Applications
  - Servers
  - Storage Systems
  - Printers
  - Switching/ Routing system
  - Access/ Transmission Equipment
  - Wireless Base Station
  - Instrumentation & Medical Equipment
  - Home Entertainment Equipment
  - Mobility Device

# TECHNICAL INFORMATION

## PART NUMBERS (Ganged Multi-Ports Modular Jack Connector)

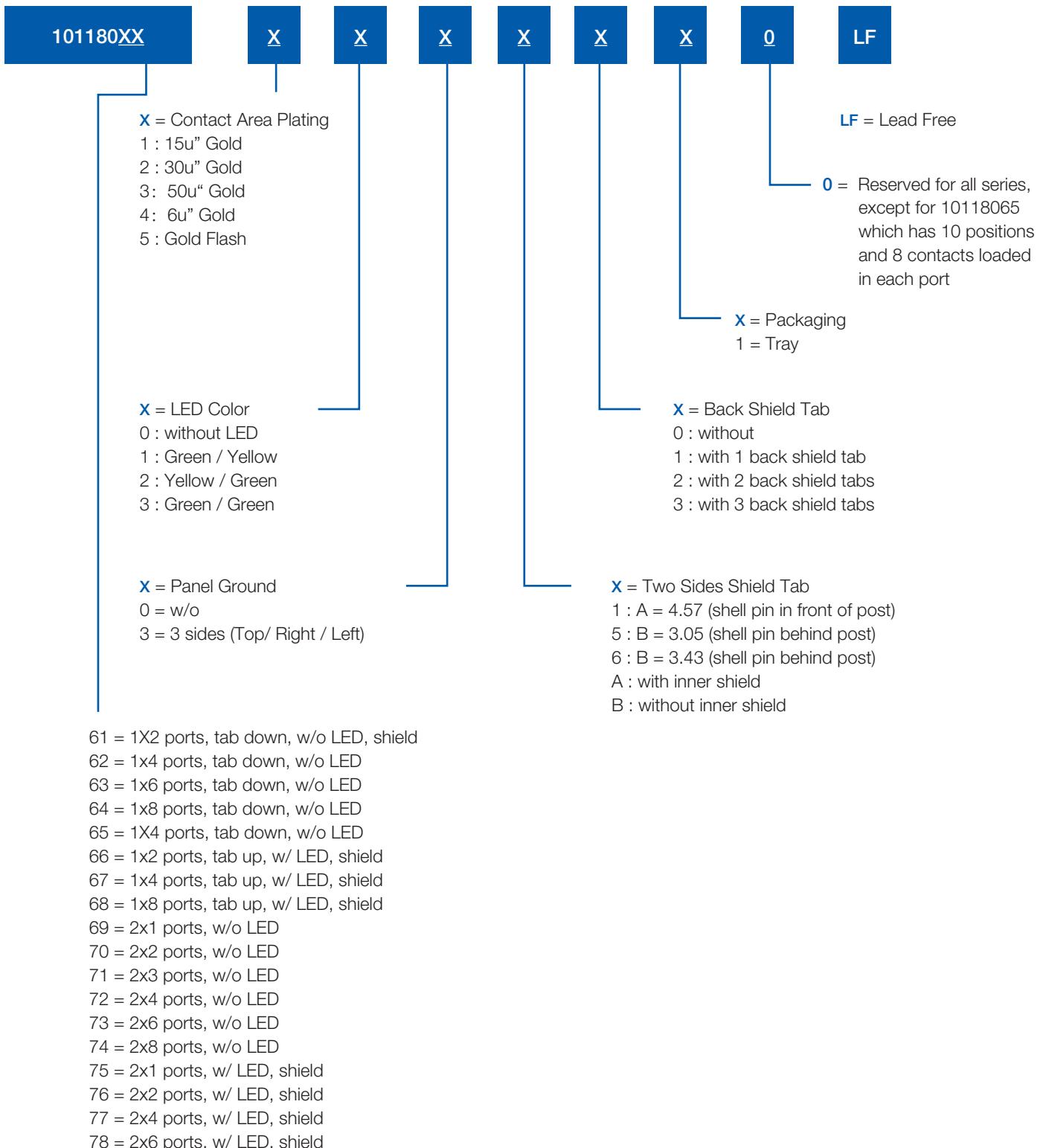


## PART NUMBERS (Single Port Modular Jack Connector)



# TECHNICAL INFORMATION

## PART NUMBERS (Ganged & Stacked Multi-Ports Modular Jack Connector)



# TECHNICAL INFORMATION

## MATERIALS

- Housing: High thermoplastic UL94V-0, Black
- Terminals:
  - RJ Contacts: Copper alloy
  - RJ Solder Pins: Copper alloy
  - LED Solder Pins: Steel
- Shields: Copper alloy

## ENVIRONMENTAL

- Thermal Shock (Temperature Cycling): meet EIA-364-32
- Humidity-Temperature Cycling: at 40  $\pm 2^{\circ}\text{C}$  and relative humidity of 90 - 95% for 96 hours
- Temperature Life (Heat Aging): 65 $\pm 2^{\circ}\text{C}$  for 96 hours
- Salt Spray: mated/unmated connectors to 5% salt-solution concentration, 35 $^{\circ}\text{C}$  for 48 hours

## ELECTRICAL PERFORMANCE

- Low Level Contact Resistance:
  - 40m $\Omega$  (maximum) initial
  - 50m $\Omega$  (maximum) final
- Insulation Resistance:
  - 1000M $\Omega$  (minimum) initial
  - 50 M $\Omega$  (minimum) final

## MECHANICAL PERFORMANCES

- Mating & Un-mating Force:
  - Insertion Force: 22N (maximum)
  - Unlocked Withdrawal Force: 9.8N (maximum)
  - Locked Withdrawal Force: 89N (minimum)
- Solderability
  - Solderable area has minimum 95% solder coverage
- Physical Shock: meet EIA-364-27
- Durability: 1000 cycles; 750 cycles (P/N 10117863)
- Random vibration: meet EIA-364-28

## APPROVALS AND CERTIFICATIONS

- RoHS compliant per EU Directive 2002/95/EC
- Meet European Union Directive specified in GS-22-008
- UL94V-0

## PACKAGING

- Tray for multi-ports
- Tray, tape & reel for single port P/N 10117863

## SPECIFICATIONS

- Product specification: GS-12-0990
- Product specification: GS-12-0947 (P/N 10117863)
- Packaging specification: GS-14-2170
- Packaging specification: GS-14-2113 (P/N 10117863)
- Packaging specification: GS-14-1503 (P/N 10113616)