Micro Coaxial Connector – 51495 / 51496

Overview

As 5G Technology expands and the data transmission rate keeps rising, the antenna and EMI interference issues are getting more serious.

ACES Micro Coaxial Connector series is the micro-coaxial solution designed for applications that need high data rate transmission and EMI mitigation. 51495/51496 series has a high data transfer rate up to Thunderbolt 3 and has complete shielding with multiple grounds for mitigating EMI issues.

P/N	Description	Mating Height (mm)	Mating Depth (mm)	Available Pin (Circuit)
51495 Series	0.4mm Pitch LVDS Micro Coaxial Receptacle SMT Type	2.10mm ± 0.15 mm	4.90 mm (When Latch Locked)	20/ 30/ 40
51496 Series	0.4mm Pitch LVDS Micro Coaxial Plug Connector			

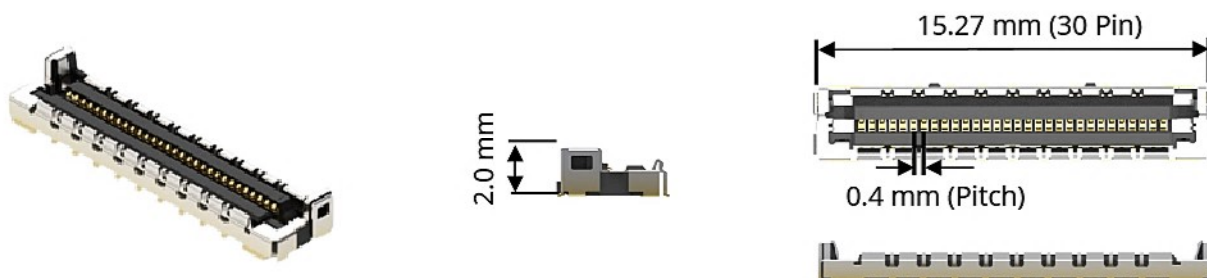## Applications

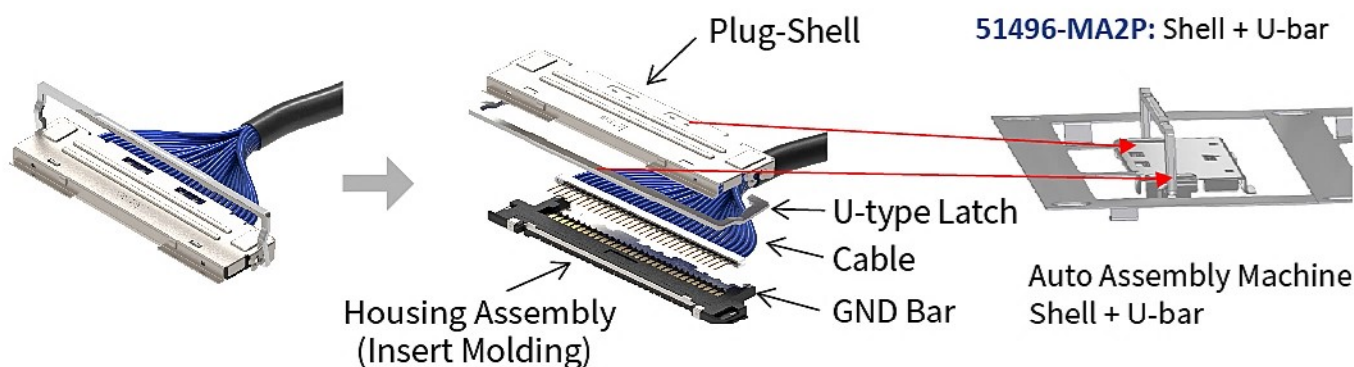Notebook   Security Camera   Chromecast   Networking   Drone

Products

51495
0.4mm Pitch LVDS Micro Coaxial Receptacle SMT S/R S/T type

15.27 mm (30 Pin)

2.0 mm

0.4 mm (Pitch)

Plug-Shell

51496-MA2P: Shell + U-bar

U-type Latch
Cable
GND Bar

Housing Assembly
(Insert Molding)

Auto Assembly Machine
Shell + U-bar

51496
0.4mm Pitch LVDS Micro Coaxial Plug Connector

| Connector Type			LVDS Right Angle Vertical Mating Type
Wire Pitch			0.4 mm
Board Pitch			0.4 mm
Applicable Wire (AWG#)	Twincoax		#40
	Discrete		#34 or smaller
	Micro-Coaxial for signals		45Ω : #38 or smaller
			50Ω : #40 or smaller
Mated Size	Height		2.10 +/- 0.15 mm
	Depth		4.90 mm (When Latch Locked)
Wiping Length			0.65 mm
Performance (Reference only)			Thunderbolt 3 (20 Gbps/lane) PCIe Gen 4 (16GT/s) USB 3.1 Gen 2 (10 Gbps) eDP HBR 3 (8.1 Gbps)

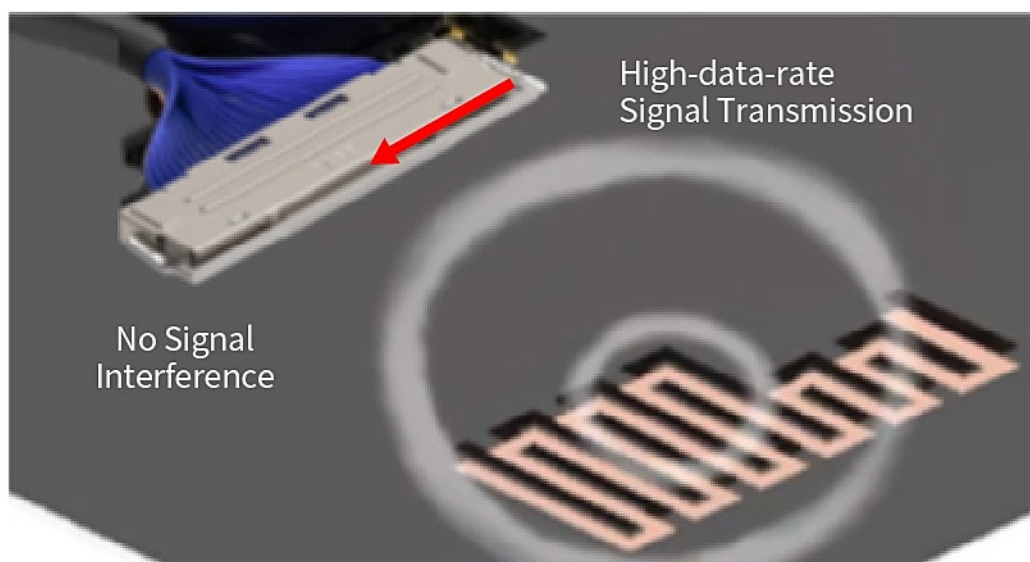## Features & Benefits

■ Whole Area EMI Shielding

Prevent EMI Leakage with 360° EMI Shielding & Multi-point Ground Design
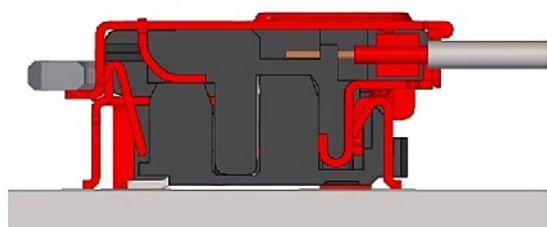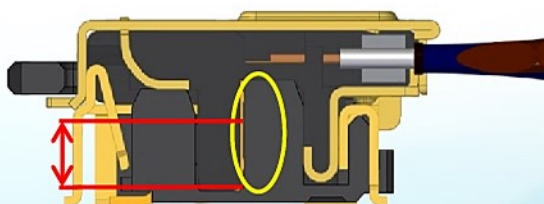

■ **Full Shielding Connector**

Ground SMT Point

High-data-rate Signal Transmission

No Signal Interference
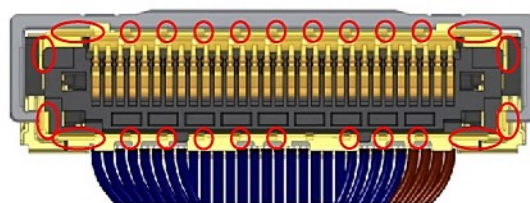
■ High Contact Reliability

Prevent EMI Leakage with 360° EMI Shielding & Multi-point Ground Design

Wiping Length 0.65mm MIN.

Features & Benefits
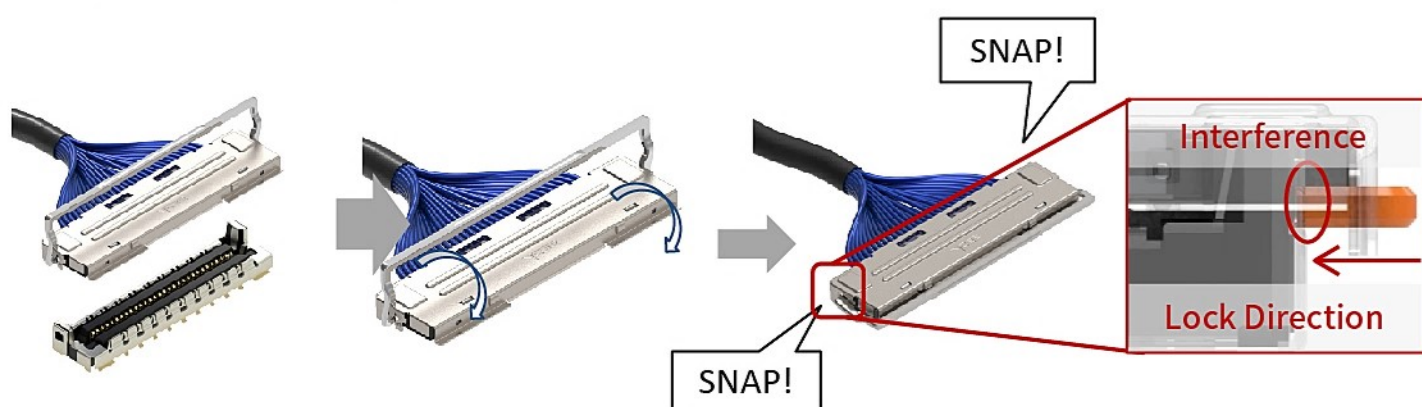
■ U-type Latch Design

1. High Mating Retention Force with Mechanical Locking Bar

Locking Process

SNAP!

Interference

Lock Direction

SNAP!

2. Convenient to re-mating plug and receptacle

Unlocking Process

**Lift up the latch easily

Unlock Direction

UNLOCK

**Lift the plug with fingers; without JIG is ok.