

# USB-C CABLE ASSEMBLY

3.2 Data & Power



## APPLICATIONS:

- Content Loading
- Data Transfer
- Digital Video Systems
- Electronic Flight Bag (EFB)
- Portable Electronic Devices
- Power Remote Devices

GET ON THE LIST TO RECEIVE MORE SPECS



- Scan the code
- Select USB-C (top line)
- Fill out the form & Submit
- PIC will email you info upon completion of final testing

## PRODUCT DESCRIPTION

The new PIC Wire & Cable USB-C Cable Assembly is the first of its kind in the aerospace and defense market and provides a comprehensive solution for data transfer, efficient charging, and error-free connections due to its reversible plug that safeguards against connector pin damage for aerospace applications. The superior cable construction minimizes power consumption in charging applications.

In addition, the cable assembly's cutting-edge locking screw connector ensures a stable connection in challenging, vibration-heavy settings while the overmolded connection enhances durability, offers strain relief, and boosts resistance to foreign object damage (FOD).

FEATURES	BENEFITS
Reversible Plug	Unable to insert wrong, prevents connector pin damage
Locking Screw	Maintain connection through harsh vibration
Overmolded Connection	Increased durability, strain relief, and resistance to FOD



## USB-C LOCKING CABLE ASSEMBLIES

PART NUMBER	TERMINATION/LENGTH (IN)	DESCRIPTION
11012-4949	11024	USB-C Cable Assembly with locking screws

11012-4949-11024-USB-C Cable Assembly, 24 inches



**USB-C CABLE ASSEMBLY**

# USB-C OVERMOLDING

Overmolding is the specialized high-performance manufacturing process that involves injecting a protective, durable polymer material directly around a connector and cable assembly to create a single, sealed and ruggedized component. Once encapsulated, it provides increased durability, strain relief and helps resist shock and vibration. During our overmolding process, we incorporate a copolymer (a copolymer is derived from two or more different types of monomers) allowing for tailored, specialized properties we spec out to meet both the electrical and mechanical performance needs of this USB-C Cable Assembly. Our highly skilled technicians prepare the assembly, aligning the locking screws into the mold cavity to ensure correct positioning, then utilize injection molding and remove any FOD for final testing and quality inspection of the part.

SCREW HOLE    PCB CONNECTOR CAVITY    SCREW HOLE



## PIC ASSEMBLY SOLUTIONS

We assemble cables and connectors to maximize their mechanical and electrical performance while preserving signal integrity. We design complete connectivity solutions to meet or exceed your design challenges through:

- Customized connectivity solutions
- Turnkey pre-engineered assemblies
- Rapid in-house assembly services
- In-stock component availability
- Extensive range of connector products
- Full technical support available at your fingertips
- IPC-620 certified technicians ensure expert assembly
- Quality overmolding and automation processes
- Laser marking for custom labeling
- Complete lot traceability with serialization
- Specially designed precision tooling for demanding applications
  - Assemblies are tested to meet system specifications, maintain quality and ensure reliability
  - Test data is sent with every assembly and retained for future reference

## ADVANCED TESTING

We utilize a wide variety of engineering experience, skills and capabilities to design, manufacture, test and assemble harnesses and assemblies. Once we terminate, we complete third party testing for: environment, electrical, mechanical testing for shock and vibration, and EWIS. And we have the specialized onsite ability to test for: phase-matched assemblies for use in TCAS, SATCOM, ESA and other antenna systems, phase stability, TDR/Fault Finding, Ethernet channel testing up to ISO 11801 - Class F, DVI production testing, VSWR testing and reporting, and we self-certify HDMI® (4-port, S-parameter testing) and HDMI Eye Diagrams.

Our team meets the ever-growing demand for high-performing connectivity solutions specifically engineered to meet the sophisticated demands of modern aerospace and defense applications.

## PIC PRE-ENGINEERED ASSEMBLIES

Simplify your design process with pre-engineered assembly solutions. Accelerate development timelines and reduce engineering complexity. Each solution is designed for optimal performance, durability, and seamless integration.

- DVI
- USB
- HDMI
- Ethernet
- 50 Ohm S Series
- 50 Ohm Ultralite
- 75 Ohm V Series

