INTRODUCING MHC®-T2

COMPACT CONNECTOR FOR FIBER OPTIC OR HYBRID APPLICATIONS

OCC's mini hermaphroditic connector, or MHC®-T2, is an amazingly rugged, yet remarkably small connector suitable for industrial and harsh environments. Designed for quick and easy connections, the genderless mating of the MHC®-T2 connector provides a multitude of options for 2-, 4-, 6-, and 8-channels. These mini hermaphroditic connectors work equally well for both fiber optic and fiber optic/electro hybrid configurations. Where repeatable performance is critical, the MHC®-T2 provides reliable optical achievement and trusted environmental and mechanical capabilities.

MHC-T2® APPLICATIONS

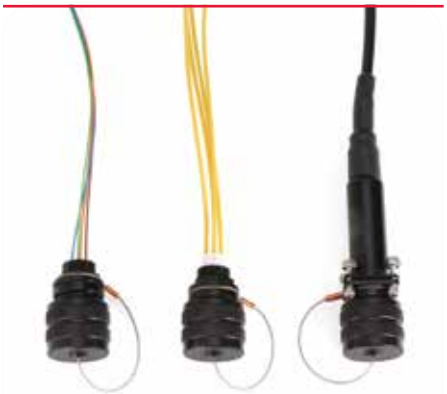
- Voice/data/video in harsh environments
- Deployed broadcast systems
- Remote monitoring sites
- Robotic arms and robot devices
- Industrial monitoring
- Military applications
- Mining applications

WHEN REQUIREMENTS CALL FOR HIGH-SPEED, HIGH-BANDWIDTH COMMUNICATIONS, TRUST OCC'S MHC®-T2 TO DELIVER:

- **SMALL SIZE AND BIG RUGGEDNESS.** The MHC®-T2's compact footprint and ability to house up to 8-channels per connector allows for higher channel counts in the same space requirements. Various plating options and an IP-68 rating also reinforce the rugged nature of MHC®-T2's environmental and mechanical performance.
- **EASY AND MANAGEABLE INSTALLATIONS.** The genderless mating or hermaphroditic design of the MHC®-T2 allows plugs and receptacles to be mated easily without regard to the gender. This design also allows two plugs to be mated together for end-to-end connections. In addition, features such as integrated pulling eyes, which assist in difficult cable pulls, make the MHC®-T2 an ideal choice for quick and easy installations.
- **TRULY EXCEPTIONAL PERFORMANCE AND RELIABILITY.** Incorporating ceramic ferrule and alignment sleeve technology, the MHC®-T2 is extremely durable and maintains high standards of insertion loss performance. MHC®-T2 maintains its incredible dependability despite repeated matings during its lifetime and is easily field-maintainable if needed.
- **MULTITUDE OF CONFIGURATIONS TO MEET ANY APPLICATION NEED.** Available in a variety of options, the MHC®-T2 can accommodate 2-, 4-, 6-, and 8-fiber optic channel configurations. The 6- and 8-channel versions are able to accommodate both fiber and copper elements. The MHC®-T2 comes with a secure threaded mating interface for applications that require a quick connection.

Whether installing an industrial network on the factory floor or deploying a broadcast system in a NASCAR racetrack, OCC's MHC®-T2 is the natural choice. Its compact and rugged design, as well as its superior optical performance, provides a reliable solution to any network application.

FEATURES & BENEFITS



MHC®-T2 receptacles can accommodate 900µm buffered fiber, 2.0mm furcated fiber, standard distribution, or breakout connector pigtails.

Secure threaded mating interface allows for quick, easy, and reliable connections which are deal for deployable or permanent installations. Hermaphroditic connectivity enables plugs to be mated with receptacles or other plug-to-plug segments in a daisy-chain series without compromising polarity.

Both the 4- and 8-channel shell size occupy a small receptacle mounting area. The 8-channel shell size can also accommodate hybrid (fiber + copper) configurations.

PERFORMANCE AND MECHANICAL SPECS

PARAMETER	SPECIFICATION	PERFORMANCE
Insertion Loss (multimode)	TIA-455-171	0.50dB – typical, 0.75dB – max.
Insertion Loss (single-mode)	TIA-455-171	0.50dB – typical, 0.75dB – max.
Back Reflection (single-mode UPC polish)	TIA-455-107	-50dB – typical, -40dB – max.
Operating Temperature	TIA-455-5	-54°C to + 71°C
Storage Temperature	TIA-455-5	-57°C to + 85°C
Mating Durability	TIA-455-21	1,000 cycles
Impact	TIA-455-2	Method B
Twist	TIA-455-36	±90° rotation, one cycle/5 sec., 1,000 cycles
Cable Sealing Flex	TIA-455-1	Procedure I
Cable Retention (Mil. Req.)	TIA-455-6	400 lbs. min.
Crush Resistance	TIA-455-26	450 lbs.
Temperature Life	TIA-455-4	250 hrs., 85±2°C
Thermal Shock	TIA-455-71	Condition B-0 except 10 cycles, @ 85°C and -62°C
Physical Shock	TIA-455-11	Condition C, 5 shocks/axis
Vibration	TIA-455-1	Condition III & VI, Condition C for 1.5 hrs.
Humidity	TIA-455-5	Type II
Dust Test	IEC 60529 IP68	8 hrs. dust exposure with 20 mbar
Water Submersion	IEC 60529 IP68	48 hrs. in immersion tank/1 meter water

FEATURES & BENEFITS

Pulling eye dustcap enables pre-terminated assemblies to be pulled easily through conduit spaces. Ideal for applications that require quick deployments and retrievals.

All-metal shell construction enables MHC®-T2 to survive harsh environments.

The one-click tool allows for quick and easy access for cleaning of the fiber optic termini.

PRODUCT OPTIONS FOR A COMPLETE MHC®-T2 SOLUTION

Plug-to-Plug Cable Assembly on OCC MARS Reel

Harsh Environment Enclosures

MARS Reels in Cartridge System

WHAT TO KNOW WHEN ORDERING

HOW MANY CHANNELS WILL I NEED?

The MHC®-T2 can accommodate 2-, 4-, 6-, and 8-channel counts.

WHAT SIZE MHC®-T2 DO I NEED?

MHC®-T2 is available in two shell sizes. Shell size A can accommodate up to 4-channels and shell size B up to 8-channels. Shell size B can also accommodate hybrid configurations or a combination of fiber optic channels. Electrical connectivity is provisioned as a pair of contacts (PIN/SOCKET) within the mated connectors and can accommodate a range of copper wire. Standard configurations utilize 16 AWG gauge, however, other copper sizes are available upon request.

DO YOU REQUIRE A PLUG-TO-PLUG ASSEMBLY OR A PLUG-TO-DISCRETE CONNECTOR ASSEMBLY?

OCC has the capabilities to provision both types of assemblies. If you are requesting an MHC®-T2 plug-to-plug assembly, simply contact us with the channel counts and information about your installation environment. If you require a plug-to-discrete connector assembly, please provide the type of connector (LC, SC, ST, etc.) you require. If you have questions about how to order these types of assemblies, give us a call and we can walk you through the process to find the best solution for your application.

WHAT TYPE OF CABLE IS REQUIRED?

Various cable types are available to meet any application, and OCC can provision any assembly to the specific length that meets your need. Contact your OCC Sales Representative for help in determining the best cable for your application.

DO I NEED SPECIAL PLATING?

All MHC®-T2 configurations are supplied with black anodized aluminum as standard plating. Additional plating and material options are available. For applications that require the plug and/or receptacle to be grounded, conductive plating and material options such as aluminum with nickel-teflon, brass, or stainless steel are available.

DO YOU NEED EASY FIELD DEPLOYMENT?

OCC has a variety of options to help with deploying your MHC®-T2 cable assemblies. Contact OCC Sales to learn about our MARS Reels, Integrated Cleaning Kits for MHC®-T2, and all the deployable accessories for the MARS Reel. Together we can find the right options for your requirements.

Contact a representative today! **800-622-7711**

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