

HMA-J Series connector

Description:

The OPTOKON HMA-J connector series, a medium size „Expanded Beam“ connector is designed for connection of the nodes of tactical network by the help of cables with optical fibers. The used expanded beam technology preserves all advantages of signals transmission through the optical lines in field harsh environmental conditions. Additionally to military optical networks the HMA-J is suited for a vast array of applications, like heavy industry connections, petrochemical application, broadcasting temporary optical lines.

The innovative designs ensure its ability for deployment in the toughest environments where high performance and total reliability are critical. Benefiting from expanded beam technology the precision optical alignment system creates immunity from water, mud, dust oil and other contaminants.

The HMA-J Hermaphroditic coupling eliminates the need for adaptors and male and female mating halves. Hermaphroditic housings allow for rapid deployment, creating low loss Singlemode and Multimode daisy chained links in a variety of planforms ranging from simplex fiber to a four fibers. The OPTOKON HMA-J is ideally suited for environmental extremities where low maintenance and quick reparability is necessary.

Features:

- Advanced expanded beam technology
- MIL-DTL-83526 specification
- Hermaphroditic interconnection
- 1 to 4 fiber channels Single mode or Multimode
- Rugged field repairable connector design
- Keyed boot for 'Blind Mating'

Benefits:

- Best optical performance available
- No adaptors necessary
- Inexpensive, low downtime field repair
- Easy clean, no special tools

Materials:

- Black anodized high grade lightweight alloy
- Neoprene BR568 Grip ring



HMA-J plug

Application:

- Broadcast
- Military communications
- Industrial
- Petrochemical



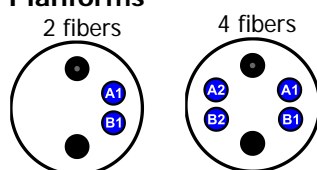
HMA-J bulkhead

Specifications:

Optical Loss	50/125 @ 850/1300 nm 0.7 dB typ., 9/125 @ 1310/1550 nm 1.0 dB typ.
Return Loss	9/125 @ 1310/1550 nm >32 dB
Durability	3000 matings minimum
Operating temperature	-55 to +85 °C
Storage temperature	-55 to +85 °C
Water immersion	2 m depth duration 24 Hours
Vibration Sinusoidal	10-500 Hz, 3 directions, 0.75 mm amplitude @ 10 G acceleration
Free fall resistance	500 falls from 1.2 m height
Bump resistance	4000 bumps @ 40 G acceleration
Tensile Strength	Tensile of 1500 N, cable dependent
Crush resistance	6.7 kN
Cable Variations	Compatible with tactical cable: Plug: 5.0-5.5 mm, Bulkhead: 2.8-5.5 mm o/d Other cable sizes available on request

All tests compliant to EN 186000-1 specifications

Planforms



Technical drawings:

<p>Plug Connector: HMA-J (SM,MM)</p>	<p>Suitable cable:</p> <p>MIL-TAC D 2 channel Ø 5.0 mm 4 channel Ø 5.5 mm</p>
<p>Bulkhead Jam-Nut: HMA-J-BN (SM,MM)</p>	<p>Suitable cable:</p> <p>MIL-TAC D 2 channel Ø 5.0 mm 4 channel Ø 5.5 mm</p> <p>Duplex 2 channel 2.8x5.5 mm 4 channel 2x 2.8x5.5 mm</p>
<p>Bulkhead Jam-Nut with Boot: HMA-J-BNB (SM,MM)</p>	<p>Suitable cable:</p> <p>MIL-TAC D 2 channel Ø 5.0 mm 4 channel Ø 5.5 mm</p> <p>Duplex 2 channel 2.8x5.5 mm 4 channel 2x 2.8x5.5 mm</p>
<p>Bulkhead Flange: HMA-J-BF (SM,MM)</p>	<p>Suitable cable:</p> <p>MIL-TAC D 2 channel Ø 5.0 mm 4 channel Ø 5.5 mm</p> <p>Duplex 2 channel 2.8x5.5 mm 4 channel 2x 2.8x5.5 mm</p>
<p>Bulkhead Flange with Boot: HMA-J-BFB (SM,MM)</p>	<p>Suitable cable:</p> <p>MIL-TAC D 2 channel Ø 5.0 mm 4 channel Ø 5.5 mm</p> <p>Duplex 2 channel 2.8x5.5 mm 4 channel 2x 2.8x5.5 mm</p>

Ordering code:

HMA	-	XX	-	XXX	-	X(SM, M5, M6) - Y(D,P)	-	(G)
M		Mini				X	fiber number	G – olive green (grip color)
J(A) ¹		Junior (4)				YD	contact number, size 20	
S		Senior (6)				YP	contact number, size 16	
-		Expanded Beam				-	plug	
F		Ferrule				BN	bulkhead jam nut	
P		POF				BNB	bulkhead jam nut with boot	
						BF	bulkhead flange	
						BFB	bulkhead flange with boot	

Note: 1) HMA-JA – cable plug, designed for LDA armored cable