

IEEE1394B Meeting in Natick, MA

September 23, 1997

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PLASTIC OPTICAL FIBER

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natickpo2.ppt (ck1, 9/17/97)

Fiber Optic Features

- x EMI immunity
- x Wide bandwidth: BOF specifies stepped index
POF as 300 Mbs up to 100 meters
- x Potential separation (electrical isolation)
- x High transmission for visible light (low loss in the
visible light spectrum)
- x Flexibility: bending radii down to 20 mm

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Fiber Optic Features

- ✘ Small size: $\varnothing \leq 2.2$ mm
- ✘ Light weight: 3.7 kg/km (2.2mm PMMA...polymethyl methacrylate...POF)
- ✘ Easy light coupling, due to a large numerical aperture
- ✘ Multiplex compatible (time, wavelength)
- ✘ Simple assembling of connectors



Plastic Fiber Applications

- x Industrial equipment controls
- x Remote sensing
- x Transportation - instrument control
- x Audio/visual equipment links
- x Data LAN networking

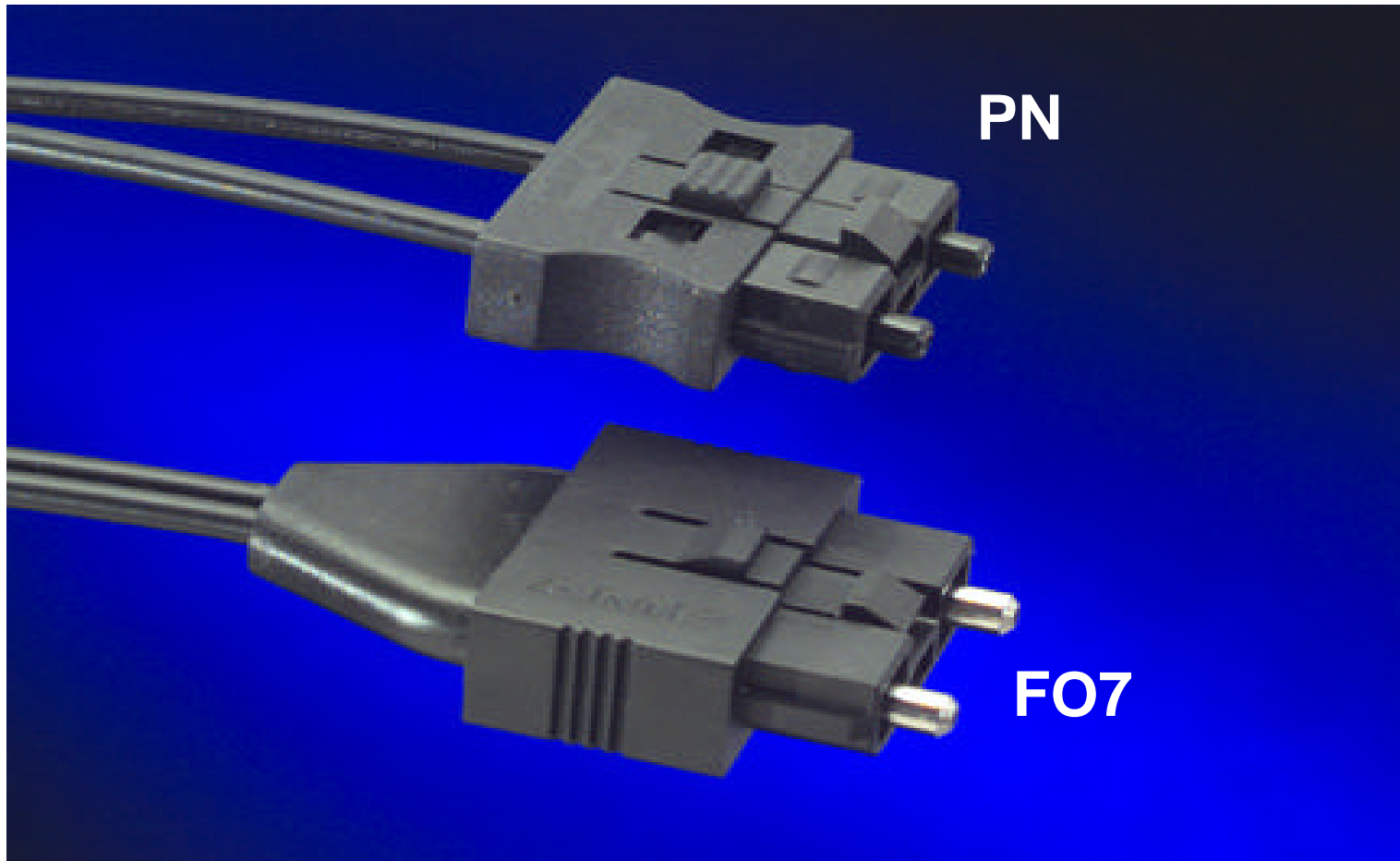


Plastic Optical Fiber Interfaces

- x FO7
- x PN - modified FO7
- x D2B (Automotive)
- x DNP (...dry non polish)
- x Audio DNP (FO5)
- x Mini DNP



F07 and PN Interfaces



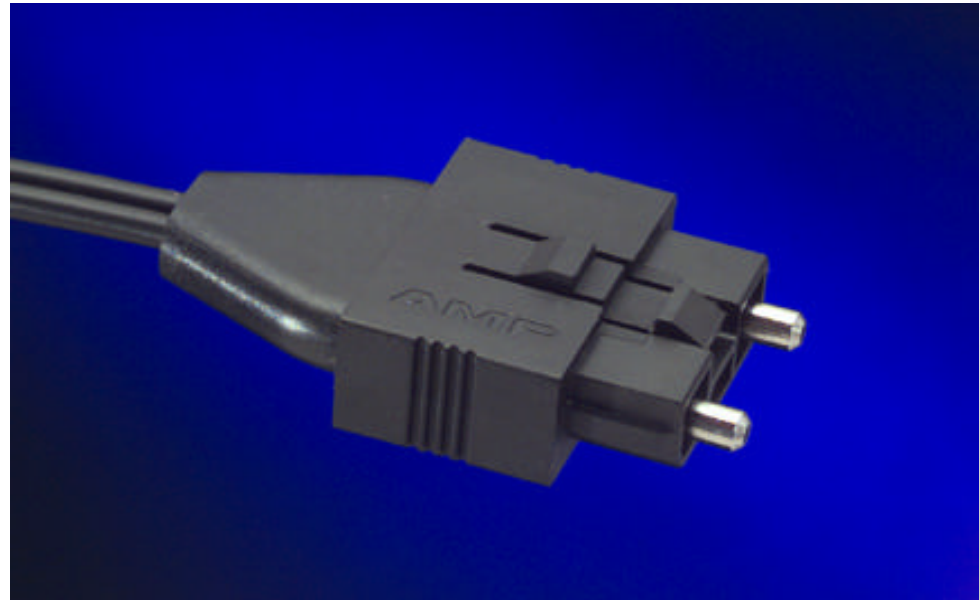
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F07 Connector

- x Product of AMP Harrisburg
- x Spring loaded metal ferrules.
- x Floating ferrule design for vibration resistance.
- x Intermateable with PN
- x Duplex configuration
- x 1000 micron plastic fiber
- x Compliance to JIS C-5976 (F07) standards.
- x Positive keying and latching features
- x Crimp or epoxy termination
- x Connectors & transceivers available.
- x Std & custom cable assembly lengths available



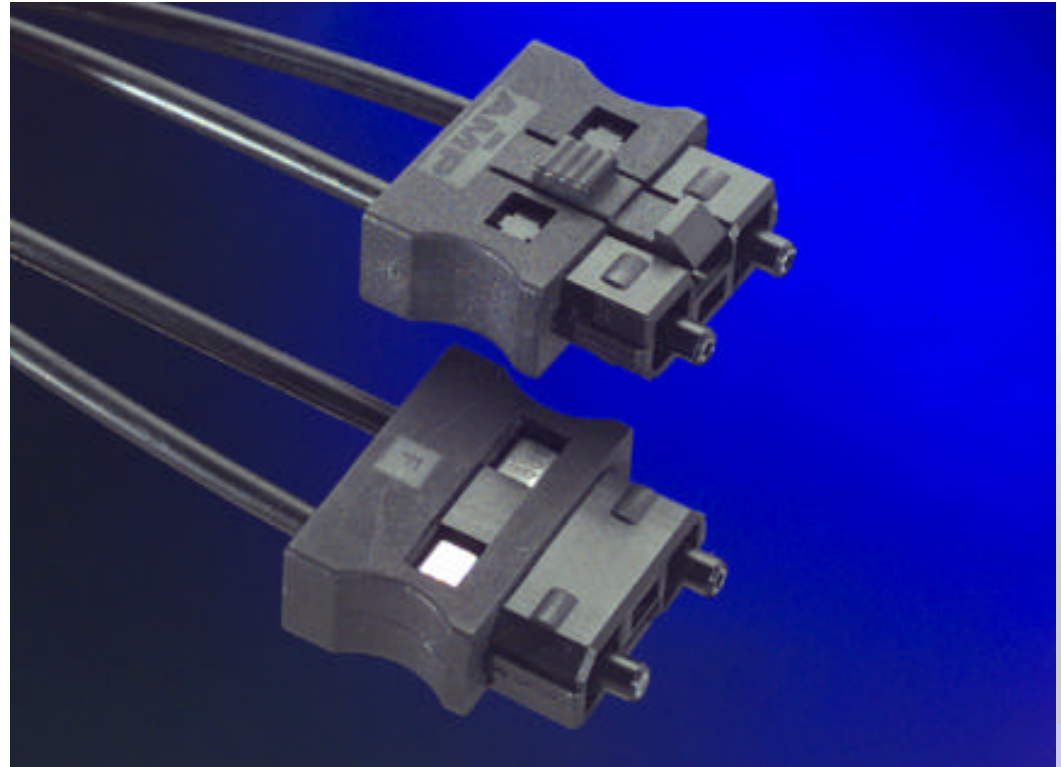
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PN - F07 Modified

- x Product of AMP Japan
- x Fixed ferrule design
- x All plastic
- x One piece design
- x Positive latching with friction lock
- x Metal clips provide for quick cable termination
- x Compliance to JIS C-5976 (FO7) standards - optional configuration
- x Connectors & custom cable-assys available.



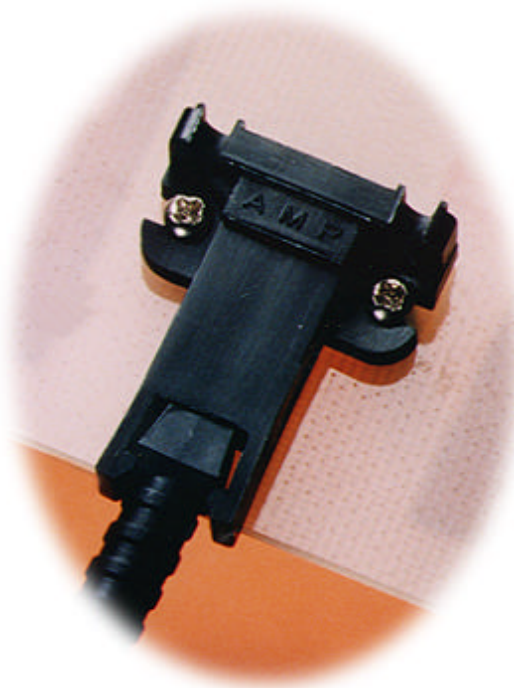
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DNP (Dry Non Polish)

- x An AMP product for 20 years
- x 1000 micron plastic fiber
- x Low cost
- x Simple field assembly using internal retention sleeve
- x Connectors, couplings, active devices available
- x Custom cable-assys



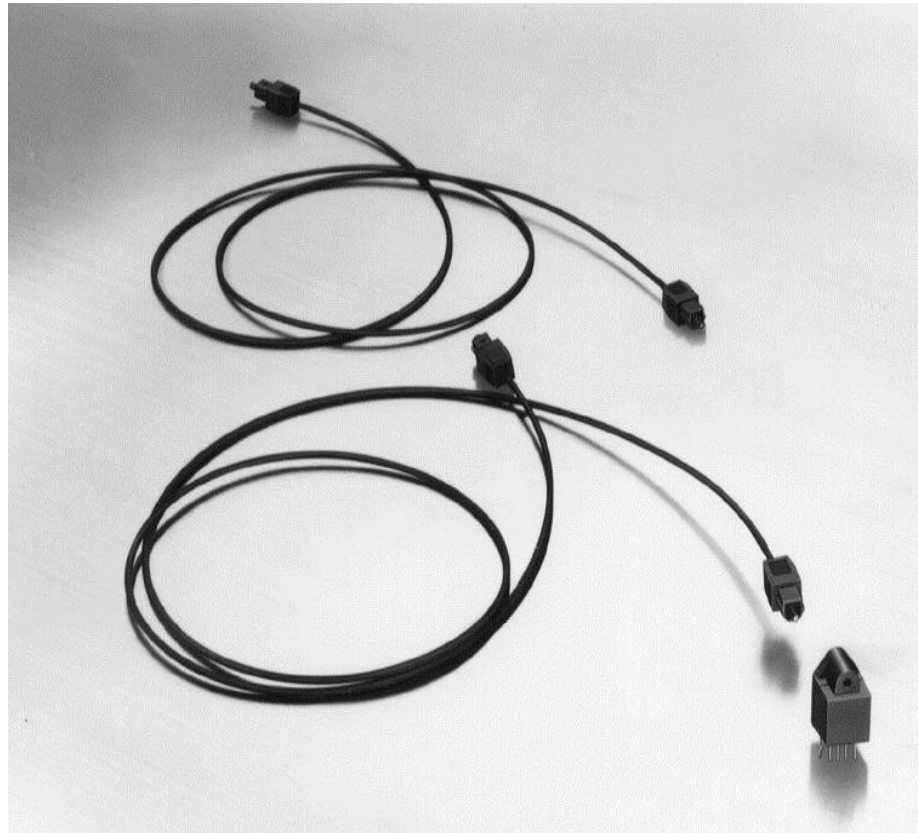
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Audio-DNP (FO5)

- x Used for audio applications in Japan
- x 1000 micron plastic fiber
- x Compliance to EIAJ RC-5720 for digital audio equipment
- x Also complies to JIS FO5 and IEC 874-17 standards
- x Broad range of active devices - panel & board mount
- x Standard & custom cable-assys



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Mini DNP

- x 500, 750 & 1000 micron plastic fiber (more size versatility than any in industry)
- x Low cost, short distance application
- x Simplex & duplex configurations
- x Standard & custom cable-assys
- x Broad range of active devices
- x Panel mount or free hanging junction bushing



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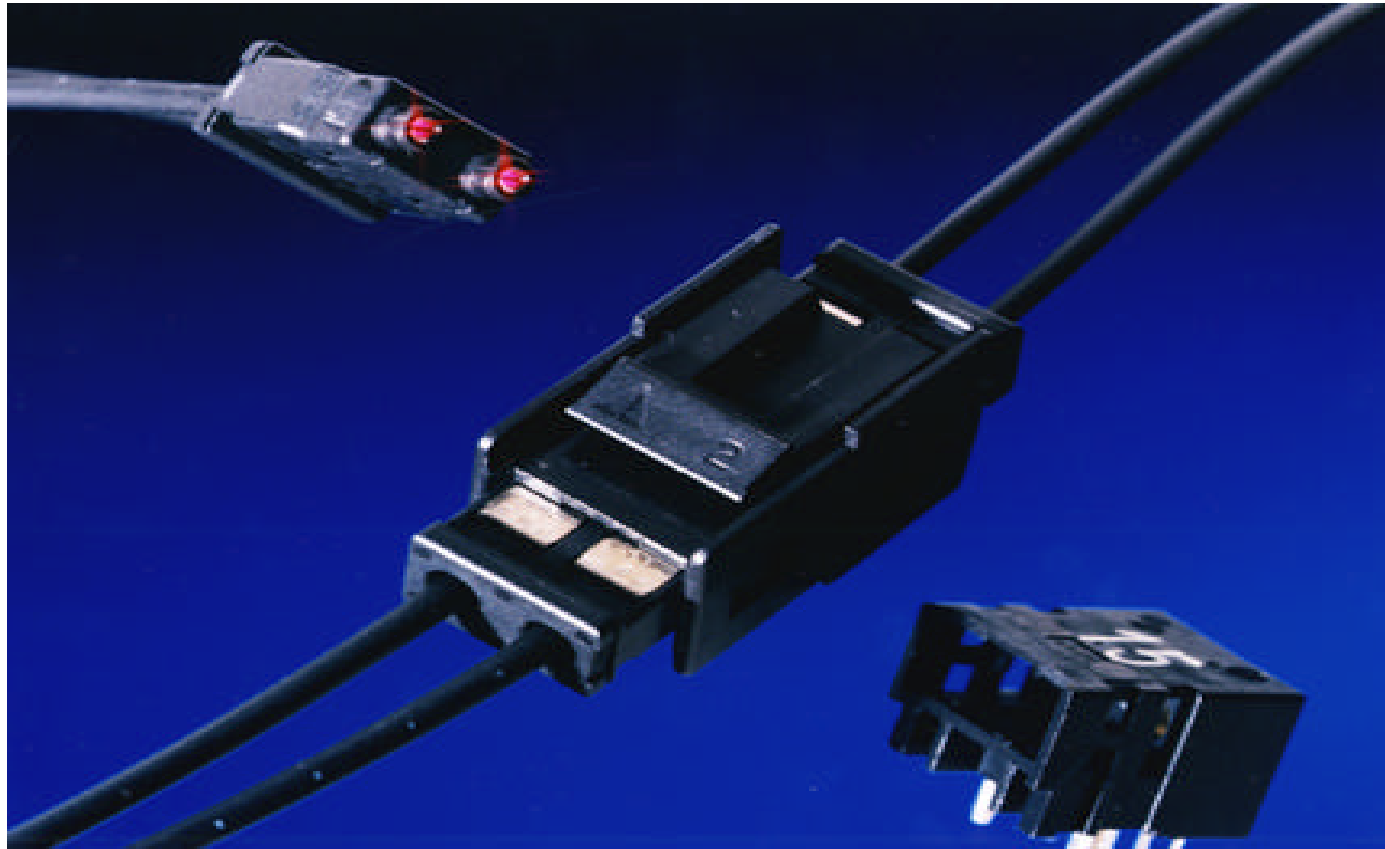


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MINI DNP



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D2B

- x Product of AMP Germany**
- x Audio applications**
- x 1000 Micron plastic fiber**
- x Fast reliable connection**
- x Lens utilizing to eliminate polishing**
- x 180 and 90 angle connections**
- x Simplex and duplex configurations**
- x Connectors, cable-assys and transceiver available**

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For more information:
call the AMP Product Information Center
at:
1-800-522-6752

and

browse the AMP Web page
at:
<http://www.amp.com/fiberoptics/>

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For more information, call



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Thank you !

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