INACTIVE FOR NEW DESIGN FIBER DESIGN APPLICATIONS. SEE SERIES 806 FIBER OPTIC CONNECTORS



Series 801 Receptacle with 181-084 pin termini



Series 801 Plug with 181-085 socket termini

- Single Mode and Multi Mode
- Snap-in, Rear Release
- Precision Ceramic Ferrules
- 0.5 dB Typical Attenuation
- 3 to 69 Channels

Reduce size and weight with Series 80 Mighty Mouse fiber optic connectors

New size 20HD fiber optic termini can be used in any standard Mighty Mouse connector but perform best in our Series 801, 804 and 805 systems. Available for single mode or multi mode fiber, these termini have low insertion loss and are intended for high-reliability aerospace applications. Series 80 connectors offer substantial reductions in size and weight compared to our D38999 type fiber optic connectors. Complete how to order instructions are included on the following pages. When ordering termini (sold seperately), please refer to the insert arrangement tables for count and size.

[Series 80 Insert Arrangements for use with #20HD Fiber Optic termini						
	1 2	5-0-3	7-0-0-3	8 3 3 10 7 6 5	13 12 20 11 10 9 8 7		
Series 801	6-23	7-25	8-28	9-210	13-220		
Series 802	6-23	7-25	8-28	9-210	12-220		
Series 805	8-23	9-25	10-28	11-210	15-220		
	18 1 30 20 20 15 0 0 0 5 35 0 0 0 0 5 25 10	41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 16 0 0 0 0 24 0 0 0 0 31 0 0 0 0 39 0 0 0 0 46 0 0 0 0 52 55	24 0 0 0 10 0 0 0 17 23 22 22 21 20 47	25 26 5 6 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		
Series 801	16-235	17-241	19-25	55	21-269		
Series 802	14-235	15-241	19-25	55	21-269		
Series 805	18-235	19-241	21-25		23-269		

See Series 80 Mighty Mouse catalog for connector ordering information. Order connectors less contacts and order fiber optic termini separately. Cavity numbers are mating face view of pin connectors.

Dimensions in Inches (millimeters) are subject to change without notice.

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Series 80 Mighty Mouse Size #20HD Fiber Optic Termini 181-084 and 181-085

Termini

Type

mm

Ferrule

O.D.

Alianment



*Consult

factory for

Ø.050 Min

Cable Entry

Fiber Size

Core/Cladding

INACTIVE FOR NEW DESIGN FIBER DESIGN APPLICATIONS. SEE SERIES 806 FIBER OPTIC CONNECTORS

Optical Fiber

Type



181-085 Socket Terminus

NOTES

Materials and Finishes

181-084:

- Ferrule: zirconia ceramic
- Body: copper-nickel-zinc alloy

181-085:

- · Ferrule, alignment sleeve: zirconia
- Body, shroud: copper-nickel-zinc alloy
- Spring (not shown): stainless steel/ passivate
- Protective cover: spring alloy/nickel **Application Notes**
- Alignment sleeve and protective cover are supplied with socket terminus assembly, and may be ordered separately (see accessories table).
- For grommet sealing plug, see Glenair part number 859-012
- Consult factory for termination and assembly procedures/tools
- Insertion/Extraction Tool Glenair Part Number 809-203D

Table II: Accessories		
181-085-S	Ceramic Alignment Sleeve	
181-085-C	Protective Cover	

Size 20HD fiber optic termini are compatible with all Series 80 Mighty Mouse threaded coupling connectors with size 20HD cavities. These snap-in, rear-release termini feature precision ceramic ferrules and sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multi mode and 9/125 single mode fiber.

ØΑ

Part Number

Ferrule Hole*

	71	71			J	
	Pin	Single Mode	181-084-1255	125.5 microns	9/125	additional
	PIII	Multi Mode	181-084-126	126.0 microns	50/125, 62.5/125	sizes
	Caalcat	Single Mode	181-085-1255	125.5 microns	9/125	
Socket		Multi Mode	181-085-126	126.0 microns	50/125, 62.5/125	
	ØA F					
Fe	rrule lole	— .250 — - Min	.86	Body		Ø.070
						- +
			U _			
	Ø1.0 mm	\Ferrule	Ø.085			Ø.050 Min
	Ferrule					Cable Entry
O.D. 181-084 Pin Terminus						
	ØA errule	450	87 79 _		•	
I	Hole	150 Min	Ø.070			
			\			
	Ø1.0 Ferrule Protective Cover					

Table I: Performance Specifications				
Optical Insertion Loss	0.5 dB typical			
Operating Temperature	-65°C to +150°C/Connector -65°C to +200°C/Termini*			
Temperature (Thermal) Shock	-55°C to +85°C, 10 cycles, per TIA/EIA-455-71, Test Schedule C. 0.5 dB max IL before test. 0.5 dB max CIT during and after test.			
Temperature Cycling	-55°C to +85°C, 5 cycles, per TIA/EIA-455-3, Test Condition A. 0.5 dB max IL before test. 0.5 dB max CIT during and after test.			
Mating Durability	500 cycles, per TIA/EIA-455-21. 0.5 dB max IL before test. 0.5 dB max CIT during and after test.			
Vibration - Random	49.5 G RMS, 24-2000 Hz, 8 hours per Axis (longitudinal and perpendicular) at Ambient Temperature, per EIA-364-28, Test Condition V. 0.5 dB max IL before test. 0.5 dB max CIT after test. Discontinuity of 0.5 dB max for 50 microseconds.			
Mechanical Shock (Half-sine Pulse)	300 G Peak, 6 Shocks per Axis, per TIA-455-14, Test Condition D. 0.5 dB max IL before test. 0.5 dB max CIT after test. Discontinuity of 0.5 dB max for 50 microseconds.			
*Depending on cable and epoxy used.				

181-085 Socket Terminus

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