

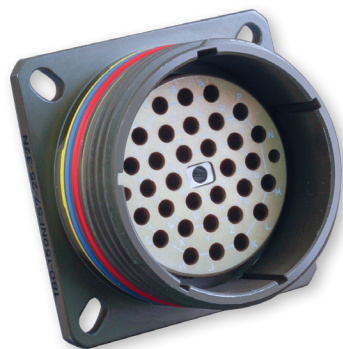
ARINC 801 Type 1

Fiber Optic Connectors and Termini

MIL-DTL-38999 SERIES III TYPE

180-159

PRODUCT SELECTION GUIDE AND PERFORMANCE SPECIFICATIONS



Product No.	Description	Page No.
ARINC 801 Connectors and Termini Selection Guide		
180-159 (06)	Plug	4
180-159 (08)	Jam Nut Receptacle	6
180-159 (05)	In-Line Receptacle	7
180-159 (H7)	Wall-Mount Receptacle with round holes (standard)	7
180-159 (S7)	Wall-Mount Receptacle with slotted holes	7
180-159 (T7)	Wall-Mount Receptacle with threaded holes	7
180-159ASR	Alignment Sleeve Retainer	9
181-076	Genderless Termini	10

Series 180-159 ARINC 801 Performance Specifications	
Test Description	Performance Requirements/Specifications
Insertion Loss	Multimode (PC): 0.30 dB typical at 850/1300nm
	Singlemode (UPC): 0.30 dB typical at 1310/1550nm
Return Loss	Multimode (PC): Better than 20 dB
	Singlemode (UPC): Better than 40 dB
Operating Temperature	-55°C to +165°C (cable/epoxy dependent)
Storage Temperature	-40°C to +85°C (cable/epoxy dependent)
Mating Durability	500 cycles, per TIA/EIA-455-21
Vibration	23.1g RMS, 8 hrs/axis, per TIA/EIA-455-11, Test Condition VI-G
Mechanical Shock (half-sine pulse)	300g Peak for 3ms, 3 shocks/axis in each direction, per TIA/EIA-455-14, Test Condition D
Thermal Cycling	-55°C to +125°C, 50 cycles, per TIA/EIA-455-3, Test Condition C-4 (cable/epoxy dependent)
Temperature Life	+125°C for 1000 hrs, per TIA/EIA-455-4 (cable/epoxy dependent)
Humidity, Steady State	+40°C for 240 hrs, 90% RH, per TIA/EIA-455-5, Method A, Test Condition B
Humidity, Temperature Cycling	-25°C to +65°C, 10 cycles for 24 hrs, 90% RH, per TIA/EIA-455-5, Method B7a (cable/epoxy dependent)



For more information
contact Glenair at
818-247-6000 or
visit our website at
www.glenair.com
U.S. CAGE code 06324

ARINC 801 Type 1

Fiber Optic Connectors and Termini

MIL-DTL-38999 SERIES III TYPE

180-159



How To Order					
Sample Part Number	180-159	NF	06	-17-8	N
Fiber Optic connector	ARINC 801 connectors, MIL-DTL-38999 Series III Type				
Material/Finish Code	See Table I				
Connector Style	06 = Plug G6 = Plug with EMI/RFI Ground Spring 08 = Jam Nut Receptacle 05 = In-Line Receptacle H7 = Wall Mount Receptacle with Round Holes (Standard) S7 = Wall Mount Receptacle with Slotted Holes T7 = Wall Mount Receptacle with Threaded Holes				
Shell Size - Insert Arrangement	See Figure I				
Alternate Key Position	per MIL-DTL-38999 Series III. A, B, C, D, E, N = Normal, omit for universal key				

Table I: Material and Finish		
Code	Material	Finish Description
ME	Aluminum Alloy	Electroless Nickel
MT		Ni-PTFE 1000 Hour Grey™ Nickel Fluorocarbon Polymer
NF		Cadmium, Olive Drab
ZN		Zinc-Nickel, Olive Drab
ZR		Zinc Nickel, Black
XM	Composite	Electroless Nickel
XMT		Ni-PTFE 1000 Hour Grey™ Nickel Fluorocarbon Polymer
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
ZL	Stainless Steel	Electro-Deposited Nickel
Z1		Passivate

Figure 1: ARINC 801 Insert Arrangements

NOTES

- Alignment Sleeve Retainer (ASR) is supplied with plug connector only, and may be ordered separately (see 180-159ASR)
- Material/Finish:
 - Shells, Barrel, Coupling Nut: See Table I
 - Inserts: Al alloy / Chem Film or Al Alloy / Anodize - Mfr's option
 - Guide Pins: Stainless Steel / Passivate
 - Seals: Fluorosilicone
 - EMI/RFI/Ground Spring: Copper Alloy / Nickel

CONNECTOR MASTER KEY

