

M83522 MIL-ST Connectors and Adapters



CablesPlus USA presents QPL Military ST Connector and ST Adapter products. This family of qualified M83522 products represents the most comprehensive line of Military Grade products available to the industry and features non-optical disconnect, nickel-plated brass, or stainless steel configurations, available in both ST and ST Adapter configurations. The M83522 qualified family of products features a highly durable, individually mounted connector system that withstands extreme temperature change, shock, vibration and corrosion, which are typical of the extreme environments or uncontrolled operating conditions the system is designed to operate within. Ideally suited for the harsh, unprotected environments of aircraft, spacecraft, shipboard and land-based applications, this connector meets or exceeds 100% of the requirements of military specification MIL-C-83522.

The OCC Military ST Connector is available in either a locking (ANX, ANY) or non-locking model (DNX, DNY) orientation and uses a convenient screw boot feature that eliminates the need for a cumbersome boot tool. The locking model features locking washers that prevent accidental optical disconnects, making the connector less sensitive to cable pull force or constant mechanical shock or vibration. The non-locking model features a higher force spring that reduces sensitivity to mechanical shock. In both models, a keyed bayonet latch provides easy engagement and disengagement. The zirconia ferrule is engineered to meet the requirements of MIL-C-83522/16, which ensures backward compatibility with legacy transceivers and ensures loss repeatability. A military part number identifies each connector.



Features & Benefits:

- * Qualified to MIL-C-83522 ensures highest performance for single terminus (ST) connector
- * Available in Nickel Plated Brass or Stainless Steel options
- * Screw-on Boot provides easy installation without any boot tool
- * Pin Body Locking Option prevents optical disconnect during high shock, vibration environments
- * Pre-Radius Ferrule is compatible with Legacy Systems
- * Enhanced Kevlar Retention allows for over 50 lb-ft of pull strength without damage
- * Accommodates a broad selection of fiber optic cables



Specifications

Specification	Parameter	Range	DNX	DNY	ANX	ANY	COTS	NY
Insertion Loss	Multimode (50, 62.5/125µm)	0.35 dB Typ., 0.75 dB Max.	X		X		X	X
Insertion Loss	Single-Mode (9/125µm)	0.40 dB Typ., 0.75 dB Max.		X		X	X	X
Return Loss	Single-Mode (9/125µm)	-50 dB Typ., -40 dB Max.		X		X	X	X
Weight	Non-Terminated	< 20 GR.	X	X	X	X	X	X
Temperature	Operational	-46° C to 85° C	X	X	X	X	X	X
Temperature	Storage	-62° C to 85° C	X	X	X	X	X	X
Tensile Loading ¹	MIL-STD-1344A	Method 2009 at 180N	X	X			X	X
Tensile Loading ²	MIL-STD-1344A	Method 2009 at 230N	X	X	X			
Flex Life	MIL-STD-1344A, M2017	Method 2017, 1000 Cycles Each	X	X	X	X	X	X
Twist	EIA-455-36	1000 Cycles, ±90° Twist	X	X	X	X	X	X
Mating Durability	EIA-455-21	500 Cycles	X	X	X	X	X	X
Impact	TIA/EIA-455-2, Method B	8 Drops	X	X	X	X	X	X
Vibration	TIA/EIA-455-11C, Cond. C	Condition II & VII, 10 GS, 1.5 Hr./Axis	X	X	X	X		X
Vibration ³	TIA/EIA-455-11C, Cond. VI	Condition F, 1.5 Min/Axis	X	X	X	X		X
Mechanical Shock ⁴	MIL-S-901, Grade A, Type A	Class 1, 3 Blows, Each Axis	X	X	X	X		X
Thermal Shock	DOD-STD-1678	Method 4020, -62° C to 85° C	X	X	X	X	X	X
Temperature Humidity Cycling	DOD-STD-1678	Method 4030, 65° C at 95% RH	X	X	X	X	X	X
Temperature Cycling	EIA/TIA-455-3	4 Cycles at 14 Hours/Cycle	X	X	X	X	X	X
Life Aging	MIL-STD-202	Method 108, 240 Hours	X	X	X	X	X	X
Pressure Altitude	MIL-STD-810	Method 500, 2000 Ft/Min.	X	X	X	X	X	X
Sand and Dust	MIL-STD-202	Method 110	X	X	X	X	X	X
Salt Spray	MIL-STD-1344A	Method 1001, Cond. A	X	X	X	X	X	X
Flammability	MIL-STD-1344A	Method 1012, Cond. C	X	X	X	X	X	X
Fungus Resistance	MIL-STD-810	Method 508, 28 Days						

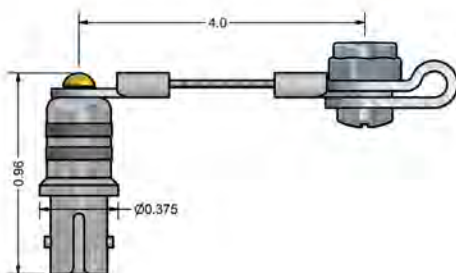
NOTES

¹ Discontinuity allowed during tensile loading.

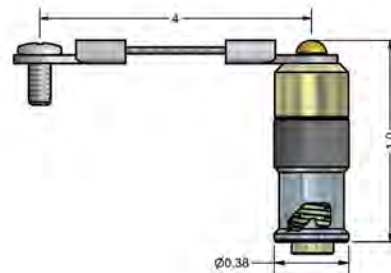
² Discontinuity not allowed during tensile loading.

³ Typical for launch conditions on-board ship.

⁴ Less than 50% reduction in transmittance for <50 usec.



SVSTP21A0 & SVSTP22A0



SVSTQ21A0 & SVSTQ22A0