



AFSI's Space ST Fiber Optic Connector

About the Space ST

Amphenol Fiber Systems International (AFSI) offers a fiber optic MIL-STD-83522 style connector and strain relief boot compliant to NASA EEE-INST-002 material guidelines for space applications. AFSI's Space ST connectors were tested to ASTM E 595 to evaluate the boot's outgassing properties and are available for all of the popular fiber sizes.

The Space ST is a M83522 style variant, which features a higher spring force than commercial ST connectors, allowing it to meet the shock and vibration requirements of MIL-C-83522. Stainless steel construction provides excellent mechanical strength and superior corrosion resistance. A companion adapter is available to support bulkhead applications

Features & Benefits

- Compliant to NASA EEE-INST-002 material guidelines
- DFAR 252.225-7014 (Domestic Specialty Metals) and RoHS compliant
- Superior optical performance in extreme environmental conditions
- Super and Ultra PC polish capabilities
- High grade stainless steel body provides excellent mechanical strength and superior corrosion resistance
- High spring force for shock and vibration resistance critical in space applications
- Stainless steel dust caps are available as a customer option

Applications

- Launch vehicles
- Satellites and other space-based platforms

Connector Part Number	Ferrule Type	
MSTC1200	127 microns	
MSTC2100	126 microns SM	
MSTC3100	140 microns	
MSTC4100	240 microns	
MSTC5100	172 microns	
MSTC6100	80 microns SM	
MSTC8100	239 microns	

Adapter Part Number			
MSTA3000			



Fiber Optic Solutions www.fibersystems.com



Space ST Connector Performance Specifications

Specification	Measurement/Detail	
Insertion Loss	< 0.75 dB (MIL-C-83522 allows for <1.0 dB)	
Return Loss	> 30 dB (multimode)	
Tensile Loading	> 230 N	
Mating Durability	> 500 cycles	
Impact	8 times, 1.5 meters	
Dust	MIL-STD-202, Method 110	
Thermal Shock	MIL-STD-1678, Method 4020	
Vibration	MIL-STD-1344, Method 200	
Temperature Humidity	DOD-STD-1678, Method 4030	
Salt Spray	MIL-STD-1344, Method 1001	
Flammability	MIL-STD-1344, Method 1012	
Temperature Cycling	-55oC to 125oC Op, -65oC to +200oC Non-Op	
Shock	MIL-STD-901D, Grade A, Type A, Class I	
Outgassing	NASA EEE-INST-002	

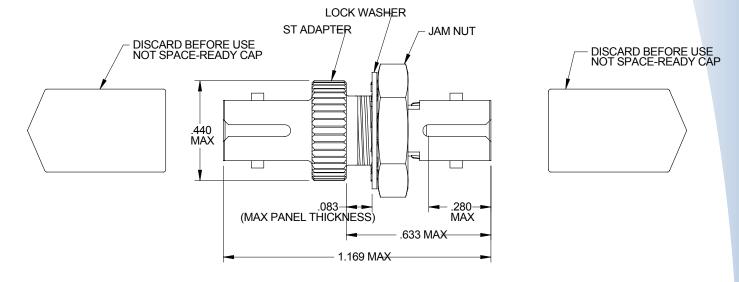
Space ST Connector Typical Performance Specifications

Specification	Inspection Detail	Single Mode	Multimode
Insertion Loss (Typical)	EIA/TIA-455-34, Method A	-0.2 dB	-0.3 dB
Return Loss	EIA/TIA-455-107	-50 dB	-30 dB

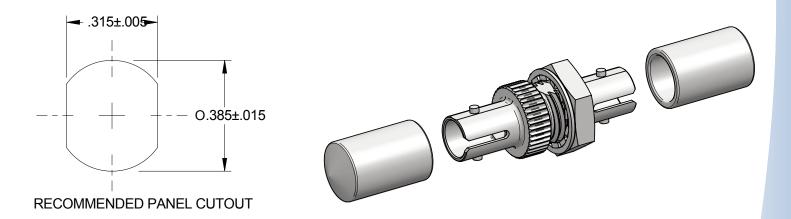
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Space ST Adapter



Space ST Connector and Panel Cutout



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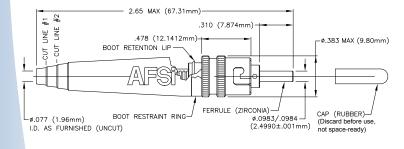




How to Order

For more information on how to order or to obtain a price quote on Space ST products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail sales@fibersystems.com.

Space ST Product Drawing



About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets, and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented. AFSI has delivered millions of fiber optic connectors in more than 34 countries. When there is a need for superior cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

Visit www.fibersystems.com for more information.

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