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AS5382™/3

FEDERAL SUPPLY CLASS

RATIONALE

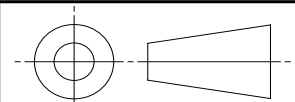
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THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8D



AEROSPACE STANDARD

CABLE, FIBER OPTIC, SINGLE-MODE,
6/125/250 μm,
HERMETIC COATED, TIGHT BUFFER

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Documents

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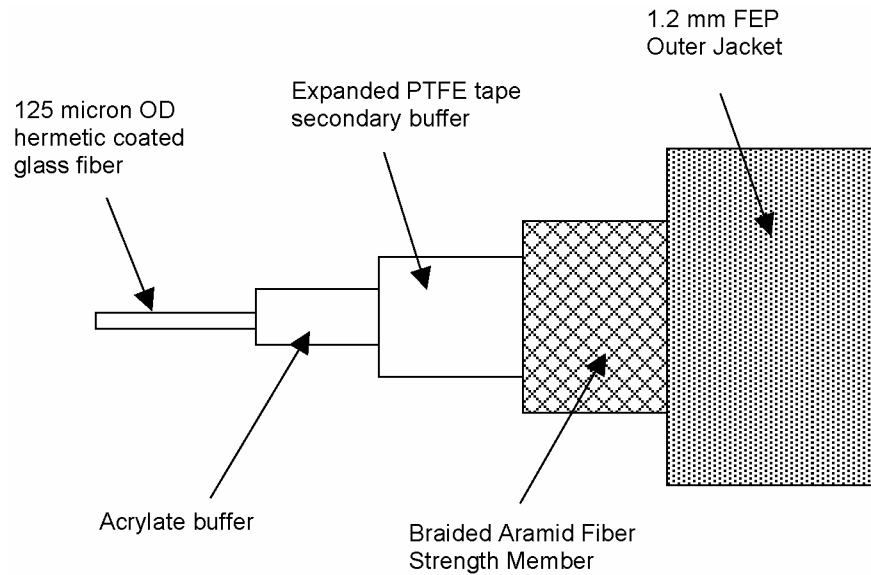


FIGURE 1 - CABLE CONFIGURATION

1. Construction Description:

1.1 Optical Fiber Dimensions and Materials

Core Diameter:	6 μm nom. (0.00024 in)
Mode Field Diameter @ 980 nm:	7 $\mu\text{m} \pm 1.0 \mu\text{m}$ (0.00028 in $\pm$ 0.00004 in)
Core Material:	Step Index Silica Glass
Cladding Diameter:	125 $\mu\text{m} \pm 2 \mu\text{m}$ (0.0049 in $\pm$ 0.00008 in)
Cladding Material:	Silica Glass
Core to Cladding Ellipticity:	2% maximum
Core to Cladding Offset:	1 μm maximum
Hermetic Coated:	Yes
Coating Diameter	250 $\mu\text{m} \pm 15 \mu\text{m}$ (0.0098 in $\pm$ 0.00059 in)
Coating Material	Acrylate

1.2 Cable Dimensions and Materials

Secondary Buffer Diameter:	0.024 +0.002/-0.005 inches (610 +50/-127 μm)
Secondary Buffer Material:	Wrapped expanded PTFE tape with overall FEP coating
Strength Member:	Braided Aramid Fiber
Outer Jacket Diameter:	0.046, +0.002, -0.003 inches (1.2 +0.05/-0.13 mm)
Outer Jacket Material:	FEP

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