

Cable, Fiber Optic - Aerospace Simplex

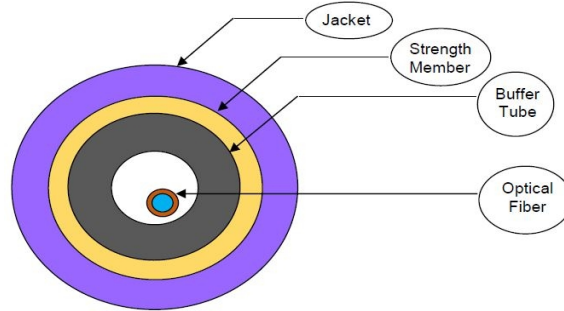
Revision History

Current	10/23/2017	Rev. 3 - KL/MR - New format, Added General Cable Willimantic, CT as manufacturing location (Cage Code 71124)
Previous	3/8/2010	Rev. 2 - RB/MB - Previous Revision

Approved Callout: 5M2551-003
GCC Part Number: OC-1698
GCC System Code: FC9700089

Standards Compliance
 5M2551 REV K

Cage Code: 71124
 General Cable, Willimantic, CT



Optical Fiber

Core Material	Graded Index Silica Glass Fiber
Core Diameter	62.5 um +/- 3.0 um
Cladding Material	Silica Glass
Cladding Diameter	125 um +/- 2.0 um

Buffer Coat

Material	Polyimide
Diameter	155 um +/- 2.0 um

Buffer Tube

Material (Lose Tube)	Fluorinated Ethylene Propylene (FEP)
Inner Diameter	0.38 mm +/- 0.025 mm (0.015 in. +/- 0.001 in.)
Outer Diameter	0.76 mm +/- 0.025 mm (0.030 in. +/- 0.001 in.)

Braid (Strength Member)

Material	Braided PTFE Coated Fiber Glass
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Outer Jacket

Material	Fluorinated Ethylene Propylene (FEP)
Outer Diameter	2.11 mm +/- 0.05 mm (0.083 in. +/- 0.002 in.)
Wall Thickness	0.25 mm (0.010 in.) nominal

Concentricity (Min./ Max)

Core to Cladding Conc. Error	3.0 um Max.
Cladding to Coating	80 % Min.

Performance

Attenuation (850 nm)	3.75 dB/km Max.
Attenuation (1300 nm)	1.5 dB/km Max.
Bandwidth (850 nm)	160 MHz.km Min.
Bandwidth (1300 nm)	300 MHz.km Min.
Proof Test	100 kpsi Min.
Numerical Aperture	0.275 +/- 0.015

Mechanical Requirements

Pull Strength	150 N (33.7 lbs) Max.
Weight	5.16 kg/km (3.5 lbs/1000 ft)
Minimum Bend Radius	2.16 cm (0.85 in.)
Cold Bend	SAE AS16781
Cyclic Flex	EIA/TIA-455-104A
Impact	EIA-TIA-455-25A
Dimensional Stability	DOD-STD-1678, Method 4060

Environmental Requirements

Temperature Rating	-65°C to 200°C
Temp/ Humidity	EIA-TIA-455-5, Method B
Fluid Resistance	DOD-STD-1678, Method 8030
Thermal Aging	EIA-TIA-455-3

Contact Information

Written By:	Katie Layne - Engineering - (859)-572-8324
Approved By:	Mike Rainville - Engineering - (859)-572-8455

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