



Single-mode optical fiber E3(G652D) 200_2% is made of preforms produced by vapor axial deposition (VAD) method. The fiber with a quartz core alloyed with Germanium and quartz cladding complies with the recommendations ITU-T G.652d. The product is manufactured in the Russian Federation, fully meets the requirements of the Russian Government Decree No. 719 dated July 17, 2015, the Russian Government Decree No. 925 dated September 16, 2016. When used in a domestically produced cable,

it allows to receive a 30% preference for purchases by Federal Law No. 223 comparing with imported analogs. E3(G652D) 200_2% enables to produce cable of smaller diameter and weight without loss of capacity. The fiber has all the characteristics of E3(G652D) 200_2%, with the only difference of reduced diameter. The fiber works in a full spectral range of different access networks including FTTH, can be applied in long distance communications.

Dimensional Specifications

Core-Clad Concentricity, μm	≤ 0,6
Cladding Diameter, μm	125±0,7
Cladding Non-Circularity, %	≤ 0,7
Coating Diameter, μm	200±5
Fiber Curl, m radius of curvature	≥ 4
Coating-Cladding Concentricity, μm	≤ 12
Length*, km	25,2 / 50,4

*Supplies of other lengths are possible

Optical Specifications

Maximum Attenuation, dB/km at wavelengths	
1310 nm	≤ 0,344
1383 nm	≤ 0,334
1550 nm	≤ 0,204
1625 nm	≤ 0,254
Attenuation vs. wavelength**	
1285-1330 nm at wavelength 1310 nm	≤ 0,03
1525-1575 nm at wavelength 1550 nm	≤ 0,02
Point discontinuity, dB	
1310 nm	≤ 0,05
1550 nm	≤ 0,05
Mode Field Diameter, μm	
1310 nm	9,2±0,4
1550 nm	10,4±0,5
Cable Cutoff wavelength, (λ _{cc}), nm	
	≤ 1260
Chromatic dispersion coefficient, ps/nm·km	
1550 nm	≤ 18
1625 nm	≤ 22
Zero-dispersion wavelength (λ ₀), nm	
	1300-1324
Zero dispersion slope, ps/nm ² ·km	
	≤ 0,0920
Polarization Mode Dispersion (PMD), ps/√km	
Maximum Individual Fiber PMD	≤ 0,2
PMD Link Design Value	≤ 0,2

** Attenuation coefficients in a wavelength range do not differ from attenuation coefficients at references more than indicated values

MacrobendLoss, dB

Compliant ITU-T G.652d

0,1 dB at 1625 nm 100 turns around a mandrel of Ø60 mm

Mechanical Specifications

ProofTest, (Other tension force on request)	GPa	≥ 1,38
	%	>2%
Coating Strip Force, N		
Peak force		1 – 8,9
Typical average force		1 – 5
Dynamic Stress Corrosion Susceptibility Parameter (Nd)		
		≥ 20

Environmental Characteristics

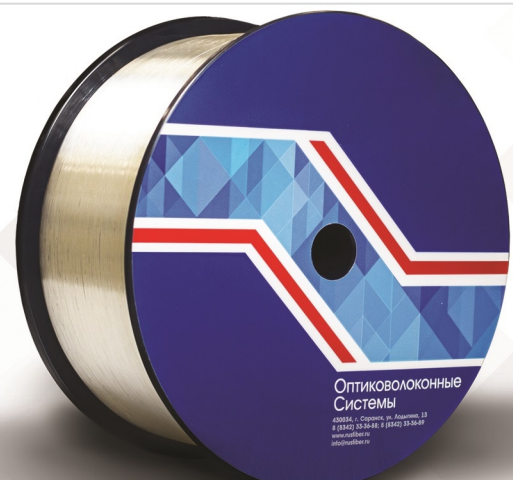
Induced Attenuation 1310 nm, 1550 nm & 1625 nm, dB/km

-60°C ~ +85°C Temperature dependence	≤ 0,05
+23°C Water Immersion	≤ 0,05
+85°C Heat Aging	≤ 0,05
+85°C/85%Damp Heat	≤ 0,05

Performance Specifications

Effective Group Index of Refraction

1310 nm /1383 nm	1,4660
1550 nm	1,4667
1625 nm	1,4670



This Technical Specification offers promotional content. Specific characteristics of optical fiber to be determined in accordance with a Contract and TU.

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