

FOC PARAMETERS

SINGLE-MODE FIBER TYPES

Fiber type ITU-IT		Maximum attenuation for uncabled fibers IL [dB/km]						
		1310 nm	1383 nm	1410 nm	1450 nm	1490 nm	1550 nm	1625 nm
G.652D	Standard single mode telecommunication fiber with zero water-pick attenuation	≤0.34	≤0.31	-	-	≤0.24	≤0.20	≤0.23
G.652D LL	Premium single mode fiber low loss with zero water-pick and lower attenuation in whole bandwidth	≤0.32	≤0.31	-	-	≤0.21	≤0.18	≤0.20
G.655 – A,B,C,D	Long distance single mode fiber with non-zero dispersion shifted (NZDSF) for CWDM and DWDM system 10G and future 40G or 100G	-	≤0.40	≤0.32	≤0.26	-	≤0.19	≤0.21
G.656 – A,B,C,D	Long distance single mode fiber with non-zero dispersion shifted (NZDSF) for CWDM and DWDM system 10G and future 40G or 100G	-	≤0.40	≤0.32	≤0.26	-	≤0.19	≤0.21
G.657A1	Bend insensitive fiber fully compatible with G.652D standard, bend radius 10-15 mm	≤0.35	≤0.35	-	-	≤0.24	≤0.20	≤0.23
G.652A2	Bend insensitive fiber fully compatible with G.652D standard, bend radius 7.5 mm	≤0.35	≤0.35	-	-	≤0.24	≤0.20	≤0.23
G.652B3 (A3)	Bend insensitive fiber fully compatible with G.652D standard, bend radius 5 mm	≤0.35	≤0.35	-	-	≤0.24	≤0.20	≤0.23
G.652B3 Plus	Bend insensitive fiber, non-compatible with G.652D standard, for connectorization application, bend radius 2.5 mm	≤0.35	≤0.35	-	-	≤0.24	≤0.21	≤0.23

MULTIMODE FIBER TYPES

Fiber type ITU-IT	Overfilled modal bandwidth [MHz/km]		Fiber Capacity [m]			Attenuation [dB/km]		Bending loss 2 turns [dB]				Bending loss 10 turns [dB]	
	850 nm	1300 nm	1GBase-SR	10GBase-SR	40GBase-SR4/100GBase-SR10	850 nm	1300 nm	Radius = 7.5 mm		Radius = 15 mm		Radius = 30 mm	
								850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
62.5/125 OM1	≥ 160	≥ 500	275	-	-	2.6	0.5	-	-	-	-	-	≥ 0.5
50/125 OM2 Bend Insensitive	≥ 500	≥ 500	600	83	-	2.3	0.5	≥ 0.2	≥ 0.5	≥ 0.1	≥ 0.3	-	-
50/125 OM3 Bend Insensitive	≥ 1500	≥ 500	1000	300	140*	2.4	0.5	≥ 0.2	≥ 0.5	≥ 0.1	≥ 0.3	-	-
50/125 OM4 Bend Insensitive	≥ 3500	≥ 500	1100	550	170*	2.4	0.6	≥ 0.2	≥ 0.5	≥ 0.1	≥ 0.3	-	-

* Maximum cabled Fiber attenuation 3.0 dB/km at 850 nm, maximum total connector loss of 1.0 dB and VCSELs maximum RMS spectral width of 0.29 nm (according to IEEE 10GbE model: http://grouper.ieee.org/groups/802/3/ae/public/adhoc/serial_pmd/documents/10GEPBud3_1_16a.xls).

BENDING LOSS

G.652D	Mandrel R=30 mm 100 turns 1550/1625 nm ≤0.03 dB	Mandrel R=25 mm 1310/1550 nm 100 turns 0.03 dB	Mandrel R=15 mm 10 turn 1550 nm ≤0.25 dB 1625 nm ≤1.0 dB
G.652D LL	Mandrel R=30 mm 100 turns 1550/1625 nm ≤0.03 dB	Mandrel R=25 mm 1310/1550 nm 100 turns 0.03 dB	Mandrel R=15 mm 10 turn 1550 ≤0.25 dB 1625 nm ≤1.0 dB
G.655 – A.B.C.D	Mandrel R=30 mm 100 turns 1550/1625 nm ≤0.05 dB	Mandrel R=15 mm 1550/1625 nm 1 turn ≤0.5 dB	
G.656 – A.B.C.D	Mandrel R=30 mm 100 turns 1550/1625 nm ≤0.05 dB	Mandrel R=15 mm 1550/1625 nm 1 turn ≤0.5 dB	
G.657A1	Mandrel R=15 mm 10 turns 1550 nm ≥0.20 dB. 1625 nm ≤0.50 dB	Mandrel R=10 mm 1 turns 1550 nm ≥0.50 dB. 1625 nm ≤1.50 dB	
G.652A2	Mandrel R=15 mm 10 turns 1550 nm ≥0.03 dB. 1625 nm ≤0.10 dB	Mandrel R=10 mm 1 turns 1550 nm ≥0.10 dB. 1625 nm ≤0.2 dB;	Mandrel R=7.5 mm 1 turns 1550 nm ≥0.50 dB. 1625 nm ≤1.0 dB
G.652B3 (A3)	Mandrel R=10 mm 1 turn 1550 nm ≥0.03 dB. 1625 nm ≤0.10 dB	Mandrel R=7.5 mm 1 turns 1550 nm ≥0.05 dB. 1625 nm ≤0.15 dB	Mandrel R=5 mm 1 turns 1550 nm ≥0.10 dB. 1625 nm ≤0.30 dB
G.652B3 Plus	Mandrel R=5 mm 1 turn 1550 nm ≥0.10 dB. 1625 nm ≤0.20 dB	Mandrel R=2.5 mm 1 turns 1550 nm ≥0.20 dB. 1625 nm ≤0.30 dB	

❖ Fiber types and applications

Tight 900 μm fiber

Possibility to remove the 900 μm coat at the distance of 1-2 cm

Semi-tight 900 μm fiber

Possibility to remove the 900 μm coat at the distance of 10-20 cm

Easy strip 900 μm fiber

Possibility to remove the 900 μm coat at the distance of 100-150 cm

❖ Available bend radius

