

Fiber Specifications (Singlemode)

Characteristics		G652D	G657A1	G657A2
Optical Characteristics				
Attenuation	1310nm	≤0.40 dB/km	≤0.40 dB/km	≤0.40 dB/km
	1383nm*	≤0.34 dB/km	≤0.35 dB/km	≤0.35 dB/km
	1460nm*	-	≤0.25 dB/km	≤0.25 dB/km
	1490nm*	-	-	≤0.23 dB/km
	1550nm	≤0.30 dB/km	≤0.30 dB/km	≤0.30 dB/km
	1625nm*	≤0.23 dB/km	≤0.23 dB/km	≤0.23 dB/km
Attenuation vs. Wavelength	1285-1330nm*	≤0.03 dB/km	≤0.03 dB/km	≤0.03 dB/km
Max. α difference	1525-1575nm*	≤0.02 dB/km	≤0.02 dB/km	≤0.02 dB/km
Dispersion coefficient	1285-1340nm	≥-3.4≤3.4 ps/(nm. km)	≥-3.4≤3.4 ps/(nm. km)	-
	1550nm	≤18 ps/(nm. km)	≤18 ps/(nm. km)	-
	1625nm	≤22 ps/(nm. km)	≤22 ps/(nm. km)	-
Zero dispersion wavelength		1312±12 nm	1300-1324 nm	1300-1324 nm
Zero dispersion slope		≤0.091 ps/nm ² . km	≤0.092 ps/nm ² . km	≤0.092 ps/nm ² . km
Typical value		0.086 ps/nm ² . km	0.086 ps/nm ² . km	0.04 ps/nm ² . km
PMD				
Maximum Individual Fibre		≤0.1 ps//km	≤0.1 ps//km	≤0.1 ps//km
Link Design Value(M=20,Q=0.01%)		≤0.06 ps//km	≤0.06 ps//km	≤0.06 ps//km
Typical value		0.04 ps//km	0.04 ps//km	0.04 ps//km
Cable cutoff wavelength λ _{cc}		≤1260 nm	≤1260 nm	≤1260 nm
Mode field diameter(MFD)	1310nm	8.7-9.5 um	8.4-9.2um	8.4-9.2 um
	1550nm	9.9-10.9 um	9.3-10.3 um	9.3-10.3 um
Effective group index of refraction(Neff)	1310nm	1.466	1.466	1.466
	1550nm	1.467	1.467	1.467
Point discontinuities	1310nm	≤0.05 dB	≤0.05 dB	≤0.05 dB
	1550nm	≤0.05 dB	≤0.05 dB	≤0.05 dB
Geometrical Characteristics				
Cladding diameter		125.0±0.7 um	125.0±0.7 um	125.0±0.7 um
Cladding non-circularity		≤1.0 %	≤0.7 %	≤0.7 %
Coating diameter		245.0±7 um	245.0±5 um	245.0±5 um
Coating-cladding concentricity error		≤12.0 um	≤12.0 um	≤12.0 um
Coating non-circularity		≤6.0 %	≤6.0 %	≤6.0 %
Core-cladding concentricity error		≤0.6 um	≤0.5 um	≤0.5 um
Curl(radius)		≥4 m	≥4 m	≥4 m
Delivery length		2.1 to 50.4 km/reel	2.1 to 50.4 km/reel	2.1 to 50.4 km/reel

*Attenuation loss of bare fiber

Fiber Specifications (Multimode)

Characteristics		62.5/125 (OM1)	50/125 (OM2)	OM3/OM4	OM5
Geometry Characteristics					
Core Diameter		62.5±2.5 um	50±2.5 um	50±2.5 um	50±2.5 um
Core Non-circularity		≤5.0 %	≤5.0 %	≤5.0 %	≤5.0 %
Cladding Diameter		125.0±1.0 um	125.0±1.0 um	125.0±1.0 um	125.050±1.0 um
Cladding Non-circularity		≤1.0 %	≤1.0 %	≤0.6 %	≤0.6 %
Coating Diameter		245±7 um	245±7 um	245±7 um	245±7 um
Coating/Cladding Concentricity Error		≤10.0 um	≤10.0 um	≤10.0 um	≤10.0 um
Coating Non-circularity		≤6.0 %	≤6.0 %	≤6.0 %	≤6.0 %
Core/Cladding Concentricity Error		≤1.5 um	≤1.5 um	≤1.0 um	≤1.0 um
Delivery Length		up to 17.6km/reel	up to 17.6km/reel	up to 8.8km/reel	up to 8.8 km/ reel
Optical Characteristics					
Attenuation	850nm	≤3.5 dB/km	≤3.5 dB/km	≤3.5 dB/km	≤3.5 dB/km
	953nm*	-	-	-	≤1.7 dB/km
	1300nm	≤1.5 dB/km	≤1.5 dB/km	≤1.5 dB/km	≤1.5 dB/km
Overfilled Modal Bandwidth	850nm	≥200 MHz. km	≥500 MHz. km	≥1500/ ≥3500 MHz. km	≥3500 MHz. km
	953nm	-	-	-	≥1850 MHz. km
Effective Modal Bandwidth	1300nm	≥500 MHz. km	≥500 MHz. km	≥500/ ≥500 MHz. km	≥500 MHz. km
	850nm	-	-	≥2000/ ≥4700 MHz. km	≥4700 MHz. km
	953nm	-	-	-	≥2470 MHz. km
10Gb/sWDM		-	-	-100/150 m	150 m
40Gb/sWDM		-	-	300/500 m	440 m
40GBASE-SR4 / 100GBASE-SR10	850nm	-	-	1000/1100 m	200 m
10GBASE-SR	850nm	-	150 m	300 / 550 m	-
100GBASE-SR	850nm	-	750 m	1000/ 1100 m	-
DMD Specification					
Numerical Aperture		0.275±0.015	0.200±0.015	0.200±0.015	0.200±0.015
Group Refractive index		1,496	1,482	1,482	1,482
		1,491	1,477	1,477	1,477
	Zero Dispersion Wavelength, λ ₀	1320-1365 nm	1295-1340 nm	1295-1340 nm	1297-1328 nm
Zero Dispersion Slope, S ₀		-	-	-	≤4(-103)/(840λ/840) ⁴) ps/nm ² . km
Zero Dispersion Slope, S ₀ 1295nm≤λ ₀ ≤1310nm		-	≤0.105 ps/nm ² . km	≤0.105 ps/nm ² . km	-
	1310nm≤λ ₀ ≤1340nm	-	≤0.000375(1590-λ ₀) ps/nm ² . km	-	-
	1320nm≤λ ₀ ≤1348nm	≤0.11 ps/nm ² . km	-	≤0.000375(1590-λ ₀)ps/nm ² . km	-
	1348nm≤λ ₀ ≤1365nm	≤0.001(1458-λ ₀) ps/nm ² . km	-	-	-