

Berk-Tek Description:	Enhanced ¹ Single-mode (AB)	62.5/125 FDDI Grade (YB)	62.5/125 Standard* (CB)	62.5/125 GIGALite * (GB)	50/125 FDDI Grade (ZB)	50/125 GIGALite * (LB)	50/125 GIGALite10 * (EB)	50/125 GIGALite10-FB * (FB)	50/125 GIGALite10-XB * (XB)
ISO/IEC	OS2	N/A	OM1	OM1	OM2	Exceeds OM2	OM3	OM4	Exceeds OM4
Mode Field or Core Diameter	9.0 ± 0.5 μm @ 1310 nm	62.5 ± 2.5 μm	62.5 ± 2.5 μm	62.5 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm
Cladding Diameter	125.0 ± 1.0 μm	125.0 ± 1.0 μm	125.0 ± 2.0 μm	125.0 ± 1.0 μm	125.0 ± 1.0 μm	125.0 ± 1.0 μm	125.0 ± 1.0 μm	125.0 ± 1.0 μm	125.0 ± 1.0 μm
Numerical Aperture	0.12	0.275 ± 0.015	0.275 ± 0.015	0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Max. Attenuation (dB/km) @ 850/1300 nm	N/A	3.5/1.0	3.5/1.0	3.5/1.0	3.5/1.5	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Max. Attenuation (dB/km) @ 1310/1550 nm	Loose Tube: 0.4/0.3 ₂	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tight Buffer: 0.7/0.7								
Minimum Bandwidth (MHz*km) @ 850/1300 nm	N/A	160 ₃ /500 ₃	200 ₃ /500 ₃	200 ₃ /500 ₃	500 ₃ /500 ₃	950 ₄ /500 ₃	2000 ₄ /500 ₃	4700 ₄ /500 ₃	4900 ₄ /500 ₃
100 Mb Transmission distance (meters) @ 850/1300 nm	> 5000 @ 1310 nm	300/2000	300/2000	300/2000	300/2000	300/2000	300/2000	300/2000	300/2000
1 GbE Transmission distance (meters) @ 850/1300 nm	> 5000 @ 1310 nm	220/550	300/600	500/1000	550/550	750/600	1000/600	1040/600	1210/600
10GbE Transmission distance (meters) @ 850/1300 nm	> 10,000 @ 1310 nm	N/A	36/300 ₅	66/300 ₅	N/A	150/300 ₅	300/300 ₅	550/300 ₅	600/300 ₅
FIBER SPECIFICATIONS			DOC#: PS 0309.R				Date: 10/25/11		

¹ Enhanced SMF-improved performance across 1260 nm to 1625 nm wavelength spectrum. Low dispersion @ 1310 nm and low attenuation in 1383 nm water-peak region allows use of extended band (1360 nm to 1460 nm). Complies with ITU-T G.652D and IEC 60793.2 B1.3.

² Optional Maximum Attenuation values 0.3/0.2 dB/km @ 1310/1550 nm are available for certain Loose Tube cables. Contact Berk-Tek for further information.

³ Overfilled launch per TIA/EIA-455-204.

⁴ Effective Modal Bandwidth as characterized by Differential Mode Delay (DMD) measurement per TIA/EIA-455-220. Minimum OFL bandwidth @ 850 nm per TIA/EIA-455-204 is 700 MHz*km for GIGALite, 1500 MHz*km for GIGALite10, 3500 MHz*km for GIGALite10-FB, and 3675 MHz*km for GIGALite10-XB fiber.

⁵ 10GbE Transmission distance @ 1300 nm applies to 10GBASE-LX4 (CWDM) only.

* No Mode Conditioning Patch Cord required. All 10GbE Transmission distances (except GIGALite-10XB) @ 850 nm assume a maximum cable attenuation of 3.0 dB/km and a connection and splice loss of 0.8 dB. For GIGALite-10XB, a maximum cable attenuation of 3.0 dB/km and a connection and/or splice loss of 0.65 dB is assumed.

NOTE: Berk-Tek will support legacy system designs. Contact Customer Service for special glass code designations.

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