Berk-Tek®
A NEXANS COMPANY

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] Tight Buffer: 0.7/0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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
10 GbE 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]
40/100 GbE Transmission distance (meters) @ 850 nm	10k/40k[6] @ 1310 nm	N/A	N/A	N/A	N/A	N/A	100[6]	150[6]	150[6]

Fiber Specifications	**Doc #: PS 0309.S**	**Date: 10/26/12**

[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 Bl.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.

[6] 40/100 GbE Transmission distance per IEEE 802.3ba

* 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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