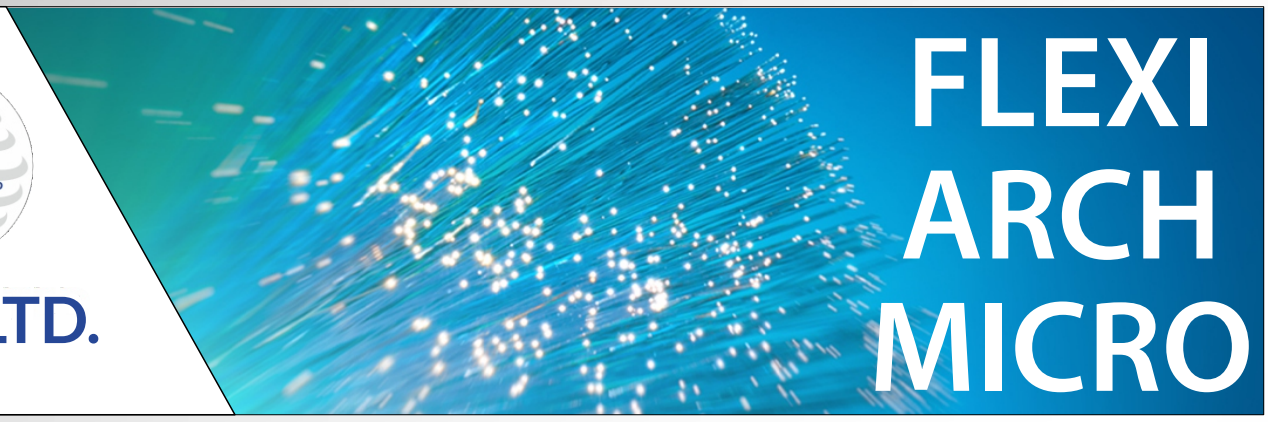
HFCL LTD.



FLEXI ARCH MICRO

PRODUCT DESCRIPTION

- HFCL'S "FLEXI ARCH MICRO" IS A LOW WATER PEAK BEND INSENSITIVE SINGLE MODE OPTICAL FIBER, DESIGNED FOR OPTICAL NETWORKS OPERATING IN FULL SPECTRUM.
- "FLEXI ARCH MICRO" PROVIDES LOW BEND LOSS PERFORMANCE, LOW SPLICE LOSS, LOW PMD AND SUPPORTS APPLICATIONS FOR FTTX, METRO, MOBILE BACKHAUL, DROP CABLES, MICRO CABLES AND ALSO SUITABLE FOR USE IN LONG HAUL TRANSMISSION.
- "FLEXI ARCH MICRO" IS FULLY COMPLIANT WITH ITU-T G.657A1/ IEC 60793-2-50 TYPE B-657A1 AND IS COMPLETELY COMPATIBLE WITH FIBERS IN EXISTING LONG HAUL, ACCESS NETWORKS.

TRANSMISSION CHARACTERISTICS

ATTRIBUTE	UNIT	VALUE
Attenuation @ 1310 nm	dB/km	≤ 0.34
Attenuation @ 1383 nm*	dB/km	≤ Value at 1310 nm
Attenuation @ 1550 nm	dB/km	≤ 0.20
Attenuation @ 1625 nm	dB/km	≤ 0.22
Point Discontinuities at 1310 nm and 1550 nm	dB	≤ 0.05
Zero Dispersion Wavelength	nm	1300 to 1324
Zero Dispersion Slope	$ps/nm^2.km$	≤ 0.090
Dispersion @ 1550 nm	ps/nm.km	≤ 17.5
PMD coefficient Individual fiber	$ps/\sqrt{km}$	≤ 0.10
PMD LDV	$ps/\sqrt{km}$	≤ 0.06

*** After Hydrogen aging according to IEC 60793-2-50.for B 1.3 fibercategory.**

GEOMETRICAL CHARACTERISTICS

ATTRIBUTE	UNIT	VALUE
Cable Cutoff Wavelength	nm	≤ 1260
Cladding Diameter	µm	125 ± 0.7
Mode Field Diameter	µm	1310 nm: 9.1±0.4 1550 nm:10.2±0.5
Core-clad concentricity error	µm	≤ 0.5
Cladding Non Circularity (Ovality)	%	≤ 0.7
Coating Diameter (Colored)	µm	190 to 210
Coating-cladding concentricity error	µm	≤ 10
Coating Non Circularity (Ovality)	%	≤ 4

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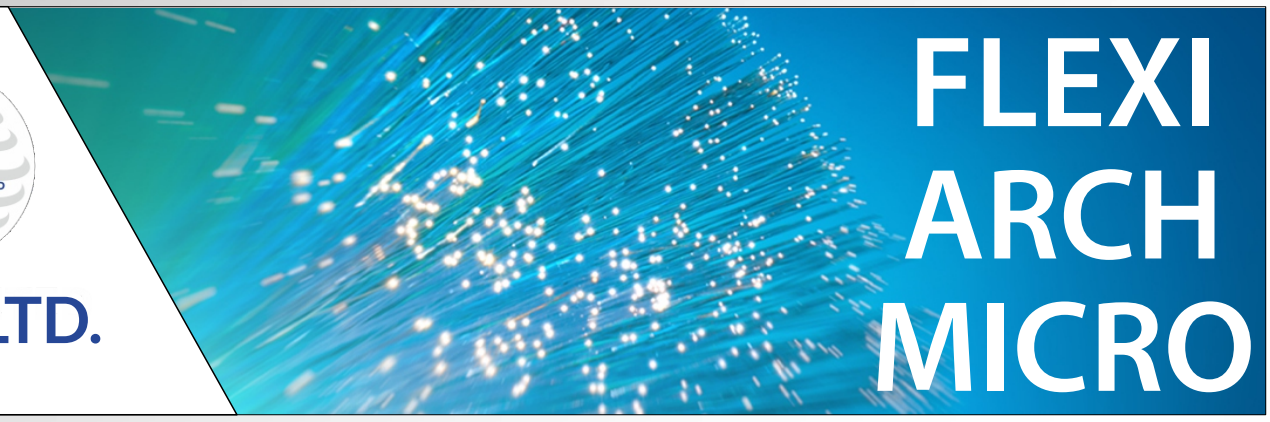

FLEXI ARCH MICRO

MECHANICAL CHARACTERISTICS

ATTRIBUTE	UNIT	VALUE
Proof stress level	kpsi	≥100 (0.69 GPa) or 1% strain
Dynamic tensile strength (un-aged)	GPa	≥ 3.8
Coating strip force (peak)	N	0.4 ≤F≤ 8.9
Fiber Curl	m	≥ 4
Stress corrosion susceptibility parameter (Dynamic Fatigue), Nd		≥ 20
Macro Bend Loss		
Change in attenuation when fiber is coiled with 1 turn around 20 mm diameter mandrel		≤ 0.20 dB at 1550 nm ≤ 0.50 dB at 1625 nm
Change in attenuation when fiber is coiled with 10 turn around 30 mm diameter mandrel		≤ 0.20 dB at 1550 nm ≤ 0.50 dB at 1625 nm

ENVIRONMENTAL CHARACTERISTICS

ATTRIBUTE	VALUE
Temperature Cycling Induced Attenuation at 1310nm,1550 nm,1625 nm at -60°C to +85°C	≤ 0.05 dB/Km
Temperature-Humidity Cycling Induced attenuation at 1310nm,1550 nm,1625 nm at -10° C to +85° C and upto 98% relative humidity	≤ 0.05 dB/Km
Water Immersion Induced attenuation at 1310nm,1550 nm,1625 nm due to water immersion at 23 ± 2° C	≤ 0.05 dB/Km
Accelerated Aging (Temperature) Induced attenuation at 1310nm,1550 nm,1625 nm due to Temperature aging at 85 ± 2° C	≤ 0.05 dB/Km
Damp Heat Induced attenuation at 1310nm,1550 nm,1625 nm due to Temperature & Humidity aging at +85° C and 85% relative humidity	≤ 0.05 dB/Km

NOTE: FIBERS CAN BE SUPPLIED BASED ON CUSTOMER REQUIREMENTS EITHER IN NATURAL / COLOR.

INSPECTION CERTIFICATE

HFCL SHALL PROVIDE IN-HOUSE TEST CERTIFICATE WHICH INCLUDE OPTICAL, MECHANICAL PARAMETERS AS PER CUSTOMER REQUIREMENTS.

MATERIAL PROPERTIES

GROUP REFRACTIVE INDEX OF FIBER:
1.466 @ 1310 nm
1.467 @ 1550 nm
1.470 @ 1625 nm

ISO 9001 | TL9000 CERTIFIED