TECHNICAL DATASHEET

FOR

FTTx Optical Fiber Cable

ITU-T G.657.A 2F

Date : June 17, 2008
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Sales Engineering Part

SAMSUNG ELECTRONICS HAINAN FIBEROPTICS

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1. Fibers

1.1 Fibers supplied against this specification must meet the requirements of ITU-T recommendation G.657.A fibers.

1.1.1 Optical specifications

Parameters		Unit	Specifications
Attenuation	1310 nm	dB/km	≤ 0.40
	1383 nm		≤ 0.40
	1550 nm		≤ 0.30
Point Discontinuities	1310 & 1550 nm	dB	≤ 0.1
Mode Field Diameter	1310 nm	μm	8.6 ± 0.4
Cable cut-off wavelength (λ_{cc})		nm	≤ 1260
Chromatic Dispersion	1285 ~ 1330 nm	ps/(nm.km)	≤ 3.5
	1550 nm		≤ 18
	Zero dispersion wavelength	nm	1300 ~ 1324
	Zero dispersion slope	ps/(nm^2.km)	≤ 0.092

1.1.2 Dimensional Specifications

Parameters	Unit	Specifications
Cladding Diameter	μm	125 ± 0.7
Cladding Non-circularity	%	≤ 1.0
Core-clad Concentricity Error	μm	≤ 0.5
Coating Diameter [Uncolored]	μm	245 ± 10

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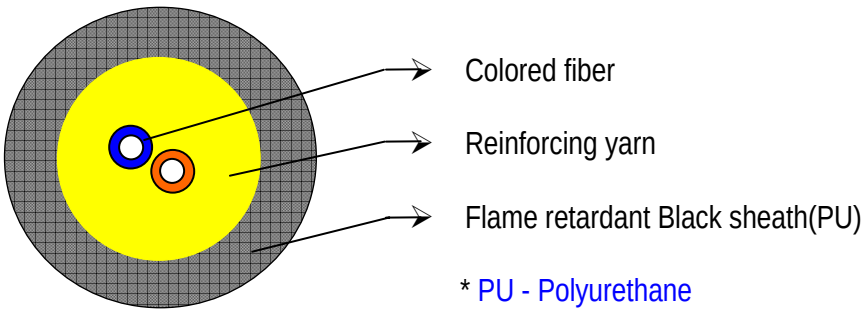
2. Cable construction

2.1. Cable drawing



2.2. Weights and dimensions

Fiber Count	Outer Diameter (Nominal)	Fiber color	Weight (Nominal)	Max. pulling strength
	mm		kg/km	N
2	3.0	Blue, Orange	7.5	500

- The nominal outer diameter may vary by ±10%
- The cable delivery length: 1km/Box

2.3 Sheath marking

200X SAMSUNG DROP CABLE SM 2F = XXXX M =

- 200X : manufacturing year (Example: 2008)
- SAMSUNG : Manufacturer name
- XXXX : The figure of meter
- The marking is printed every 1 meter

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3. Cable Properties

3.1 Mechanical & Environmental properties

3.1.1 Cable bending radius : 8 x cable diameter

3.1.2 Operating temperature range : -30°C to + 60°C
Storage/Transport temperature range : -40°C to + 70°C
Installation temperature range : -30°C to + 60°C

3.2 Mechanical & Environment Requirements

No	Item	Test Method	Specification
1	Tensile strength IEC 60794-1-2-E1	- Max. pulling load: 500N - Length: 100 m - Time: 5 minutes	- Loss change @1550nm ≤ 0.10 dB after test
2	Crush test IEC 60794-1-2-E3	- Load: 500 N for 5 mins - Metal Flat: 100 ± 5mm	- Loss change @1550nm ≤ 0.10 dB after test
3	Temperature Cycling IEC 60794-1-2-F1	- Temperature step: +20°C →-30°C →+60°C → -30°C →+60°C →+20°C - Number of cycle: 1 - Time per each step: 12 hrs	- Loss change @1550nm ≤ 0.30 dB/km

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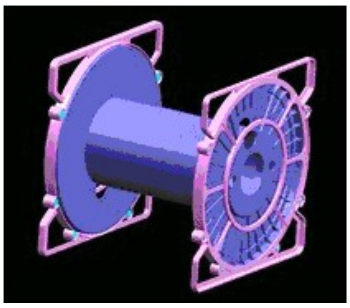
4. Packing

4.1 Packing

- The Plastic Bobbin is individually packed in a Box.
- Pallet is applied for the shipment.

4.2 Packing Picture (Ex.)



(Bobbin)

(Box: 320mm * 345mm * 365mm)

Pallet package (36 box)

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Revision History

DATE	AUTHOR	REVISION	PAGE	COMMENTS
Feb 11, 2008	YP Kim	-	-	Initial Release
June 5, 2008	YP Kim	01	4	Add cable bending radius,temperature range
June 17, 2008	YP Kim	02	3,4	1.change sheath marking 2.change cable bending radius (15 x cable diameter -> 8 x cable diameter) 3.add operating temperature range

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