

Product Specifications

	Part Name	Customer P/N	Version	Issue Date
	SN-G.657A2-Φ 2.0	/	V1.0	2024-08-03



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SN-G. 657A2-Φ 2. 0

Product Specifications

Customer PN: FBERD-BBBB-M005

Version : I0

Issue Date: 2024/08

Prepared By	
Checked By	
Approved By	

Product Specifications

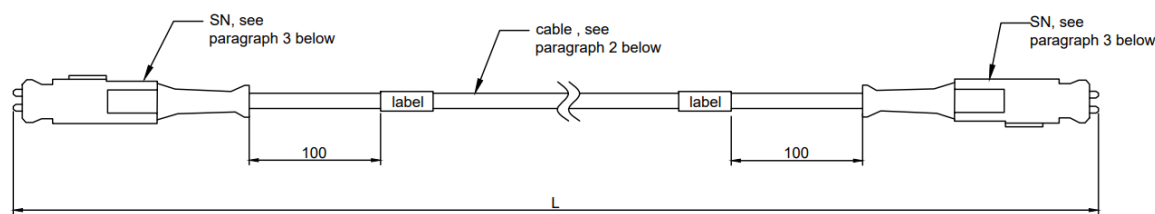
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一、 Overview

This document is SN-SN-G. 657A2-2F-Φ2.0 product specifications.

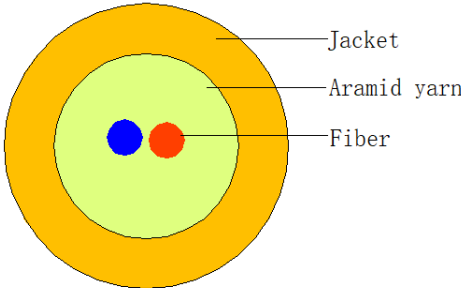
二、 Technical Requirement

1. Outline Drawing



Length (mm)	Tolerance (mm)
$L \leq 15000$	$0 \leq \Delta L \leq 150$
$L > 15000$	$0 \leq \Delta L \leq 1\% \times L$

2. Fiber cable parameters

Structure			
Fiber type	G.657A2		
ATT	@1310nm	$\leq 0.40\text{dB/km}$	
	@1550nm	$\leq 0.30\text{dB/km}$	
Dimension	Cladding diameter	$125 \pm 0.7\mu\text{m}$	
	Cladding non-circularity	$\leq 1\%$	
	Core-cladding concentricity error	$\leq 0.5\mu\text{m}$	
	Cable jacket size	OD: $2.0 \pm 0.1\text{mm}$, Thickness: $0.35 \pm 0.05\text{mm}$	
Mechanical characteristics	Tension	long term	40N
		short term	100N
	Impact		1 N.m, fiber no damage, sheath no crack
	Repeating bending		40N, 100cycles, fiber no damage, sheath no crack
	Torsion		20 N, 10cycles, $\pm 180^\circ$, fiber no damage, sheath no crack

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Bending radius	dynamic	20D(cable diameter)
	static	10D(cable diameter)
Flame resistance		IEC60332-1, UL OFNR
Temperature range	storage	-10°C~70°C
	installation	0°C~50°C
	operating	-10°C~60°C

3. Connector type

Project	Standard parameters	Remarks
Connector brand	SENKO	
Connector length	≤55mm	
Material Science	Plastic	
End face type	UPC	
Connector color	Blue	
Boot color	White	
Tensile	44.0N	

4. Product performance

4.1 Optical performance

Parameter	Requirement
Insertion loss	≤0.25 dB
Return loss	≥55 dB

Note: Add the cable attenuation $L/1000 \times 0.4\text{dB}$, when the length of product beyond 50m.

4.2 3D Parameter

Radius of curvature (mm)	5-30
Apex off (um)	≤70
Fiber height (nm)	- 100, +50

4.3 End face detection

Test items	standards
End face inspection	IEC 61300-3-35

4.4 Polarity

Test items	standards
Polarity	Crossed A-B, B-A

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5. Product reliability

Serial number	Test name	Test conditions	Judgment criteria	
			Insertion loss variation (dB)	Shape change
a	Thermal Age	+60℃, 96h	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
b	Humidity Age	Temperature 40 ℃, relative humidity 95%, 96h	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
c	Thermal Cycle	Temperature range - 10 ℃~60 ℃ 5 cycles	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
d	Dry-out Step	Temperature 60 ℃ Constant temperature for 24 hours	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
e	Vibration Test	Frequency:10 to 55 Hz Amplitude:1.5mm Time: 2 hours in both directions	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
f	Cable tension	Refer to Telcordia GR-326-CORE 4.4.3	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
g	Impact Test	Drop the block from the height of 1.5 meters, repeat 8 times	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena
h	Durability Test	Disconnection and reconnection times: 50 cycles; Measurement interval: every 10 cycles	≤0.3	There shall be no mechanical damage, such as deformation Cracking, relaxation and other phenomena

Note: measure the loss and reflectance before and after test.

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6. Packaging and identification

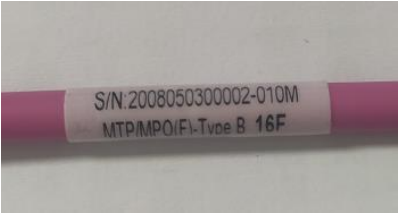
6.1 Label on the patch cord

Line label: The label content is printed according to the order content.

Line	Content	Note 1	Note 2	Note 3
Line 1	SN:YYMMDDXXXXXX-XXXM	XXXXXX is serial number	XXXM is length	
Line 2	MTP/MPO (F)-Type B 16F	MTP/MPO (F) is connector type	Type B is product polarity	16F is the number of fiber

Reference the picture below for detail:

6.



OX

Customer's product code

Quantity

Produce batch

Product number

Manufactured date

Product No: 17010063

Quantity: 1

Batch No: CL1-000007

Marking Text: FME01284840000BF010

Manufactured: 2024. 08. 02

TSC

Note:

- 1. Label size: 108mm x 64mm;
- 2. Print area: white;
- 3. Font Type: arial;
- 4. QR code: Type PDF147;
- 5. Bar code: Code 128

6.3 Packaging

Specification	Packing bag	Carton	Packing quantity	Pallet
L≤50 meters	PE bag	375*375*225mm	By actual quantity	1150*770*150mm

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50 < L ≤ 180 meters	3 # plastic cable reel	375*375*260mm	2	1150*770*150mm
L > 181 meters	2 # plastic cable reel	375*375*225mm	1	1150*770*150mm

Note:

1. Every connector will be packed individually by a small PE bag, as shown below:



6. The board height meets the requirements of container loading.

7.Application environment

Storage Temperature	-10℃~70℃
Installation Temperature	0℃~50℃
Operating Temperature	-10℃~60℃

8.Revision History

Serial number	Issue Date	Version	Description	Prepared By	Note
1	2024.08	I0	New released		