

GENERIC SPECIFICATION

RIBBON FAN-OUT CORD

NWC Network Cable Co., Ltd

Ribbon Fan-Out Cord

General

Parts and the materials of SC connector are shown in Table 2

Table-2

No.	Parts Name		Q'ty	No.	Parts Name		Q'ty
1	Ceramic Ferrule		2	5	Ribbon	4C-Ribbon	1~99
2	SC Housing Set		2/1*			8C-Ribbon	1~99
3	Fan-Out		1*			12C-Ribbon	1~99
4	Core	Φ 0.9mm	1~99				

Tolerance(JIS B 0405 class m)

Permissible deviation in dimensions without tolerance indication is in accordance with JIS B 0405 class m, as shown in Table3.

Table-3.

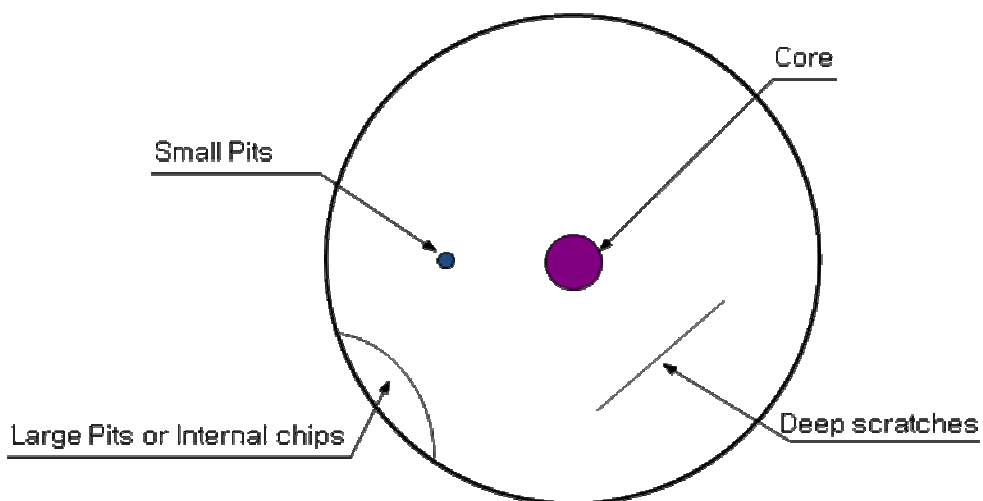
Basic size step (mm)		Permissible deviation (mm)
Over	Under	
0.5	3	±0.1
3	6	±0.1
6	30	±0.2
30	120	±0.3

Performance

Characteristics	Single Mode	Multi Mode
Insertion Loss	<0.3dB, Typical 0.2dB	<0.3dB, Typical 0.2dB
Return Loss	PC : > 45dB, Typical 48dB UPC : > 55dB, Typical 58dB APC : > 65dB, Typical 68dB	> 20dB, Typical 30dB

End Face Inspection

Check the polishing with a microscope or magnifier(X800)



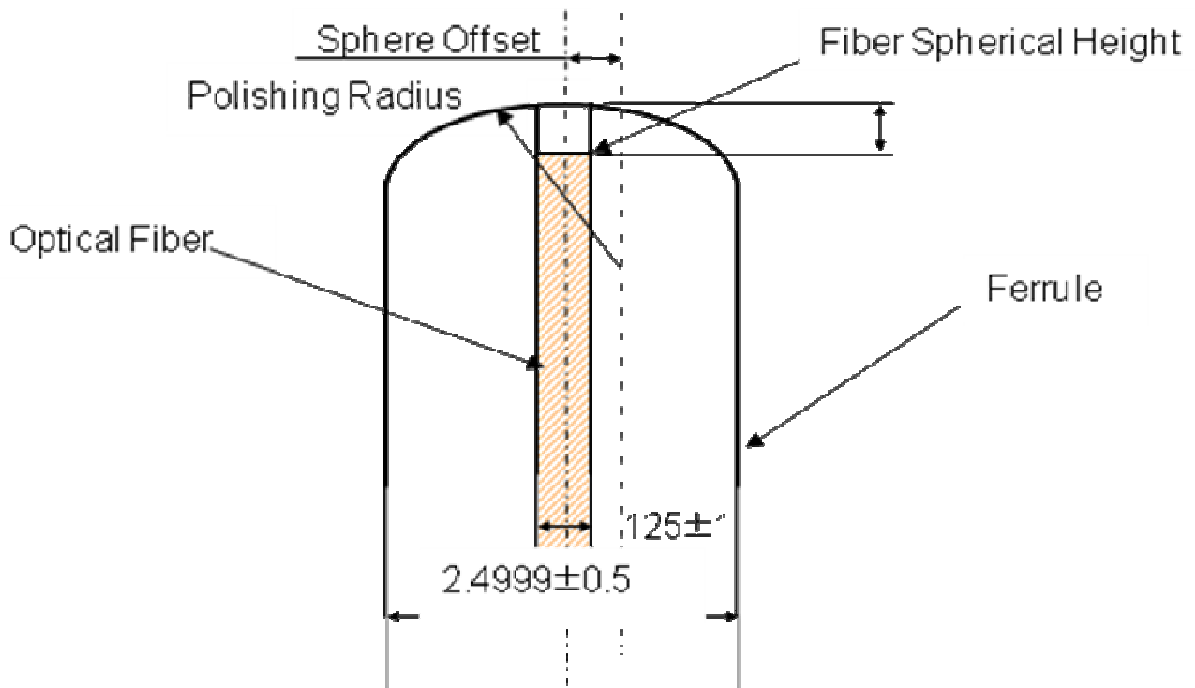
□ End face inspection Spec. of SC end

Item	Core region	Clad region		
		Scratches	Chips	Pits
SM	No defect	3 in width	20 in diameter at the outer edge	3 diameter x 15 pieces
MM	The same as clad region	3 in width	20 in diameter at the outer edge	3 diameter x 15 pieces

Geometry structure of polishing end face

□ Geometry structure of SC end

Item	PC	APC
Radius of curvature	10 ~ 30 mm	7 ~ 30 mm
Fiber spherical height	$\pm 0.05 \mu\text{m}$	$\pm 0.05 \mu\text{m}$
Sphere Offset	$< 50 \mu\text{m}$	$< 50 \mu\text{m}$



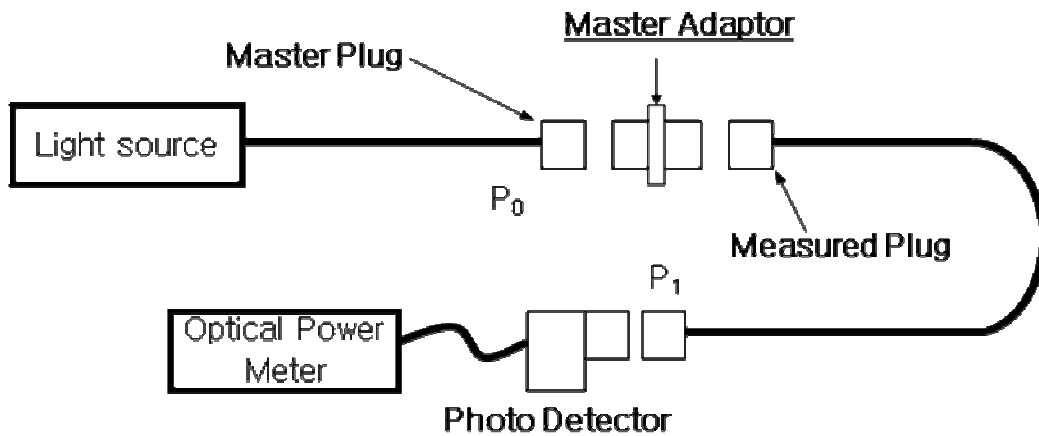
Geometry structure of SC end

Insertion and return loss measurement system

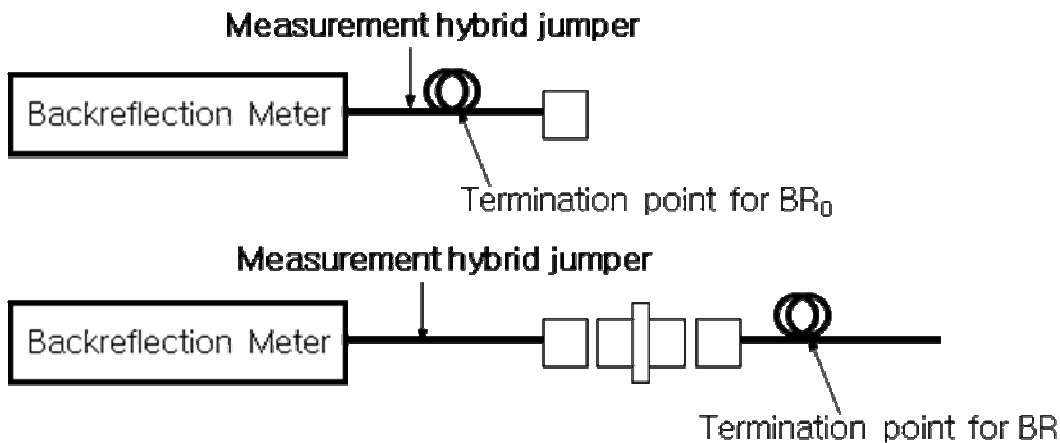
The test samples are measured in the following system

The insertion loss(I.R) is defined as $\text{Insertion Loss} = -10P_1/P_0$

Measuring instruments : RX3000 JDS Backreflection and Loss test set



Insertion Loss and Measurement system



Return Loss and Measurement system

Reliability characteristics

Reliability characteristics of SC end

Item	Condition(GR-326)	Typical properties
Impact Test	1.5 m × 8drops	Insertion Loss \pm 0.2
Cable Retention	1.25Kg, 90, 6.8Kg, 0	Δ \pm 0.2
Durability	200 times	Δ \pm 0.2
Vibration	0~55Hz/min × 2hours	Δ \pm 0.2
Twist Test	1.35Kg x(X:2.5,Y:5)	Δ \pm 0.2
Flex Test	0.9Kgf × 100 times	Δ \pm 0.2
Temperature Life	85°C × 14days	Δ \pm 0.2
Humidity	75°C , 95%RH ×14days	Δ \pm 0.2
Low Temperature	10°C × 4days	Δ \pm 0.2
Temperature Cycling	40 75 °C 8hours/cycle 42cycles	Δ \pm 0.2

$\lambda=1300$ nm Δ i : Deviation (dB)

Marking

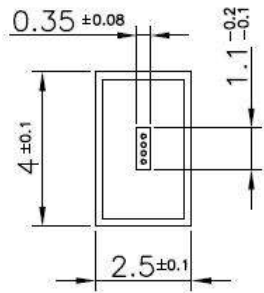
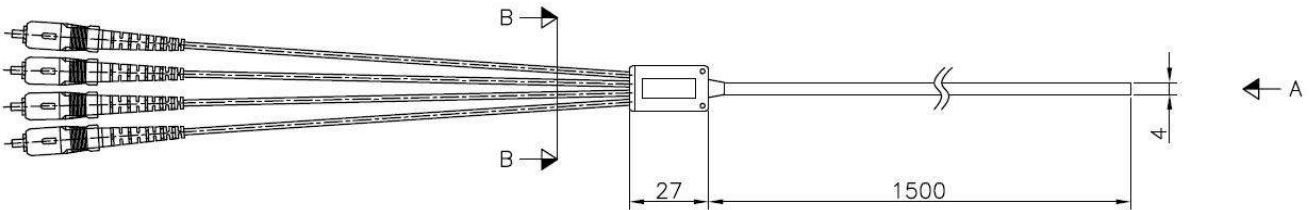
The details given below shall be distinctively marked in English with a weatherproof material, on at least two sides of the shipping carton.

- ❖ The company to be delivered
- ❖ The product item
- ❖ Country of origin
- ❖ Manufacturer's name and/or trademark
- ❖ Date of manufacture
- ❖ Caution mark

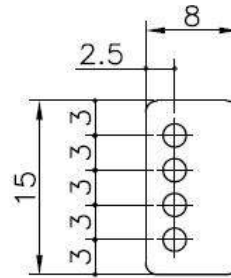
Each Ribbon Fan-Out Cord shall be marked with the company, the month and year of manufacture and the trademark and/or name of manufacturer in legible color.

Spec No.	Ribbon Fan-out Cord	Ribbon Fan-Out Cord 1×4 Ch
Code No.	Fig - 1	
Initial	2009. 2. 21	
Revised		

Unit : mm
Tolerance : 1/100



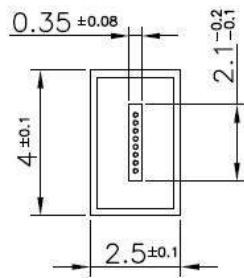
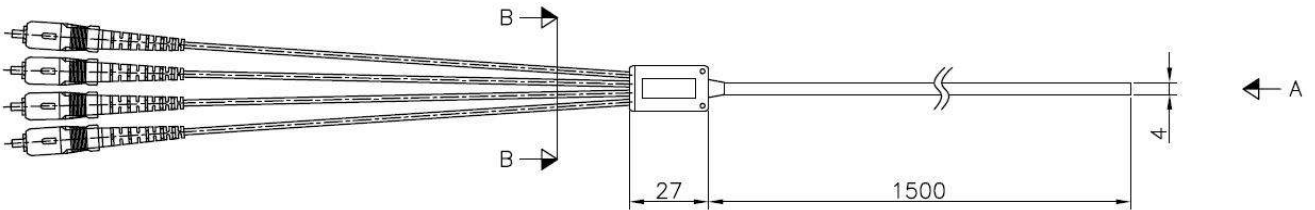
VIEW A (S=10:1)



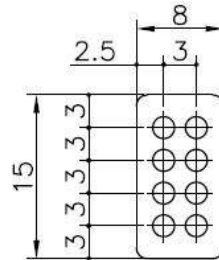
SECTION B-B (S=3:1)

Spec No.	Ribbon Fan-out Cord	Ribbon Fan-Out Cord 1×8 Ch
Code No.	Fig - 1	
Initial	2009. 2. 21	
Revised		

Unit : mm
Tolerance : 1/100



VIEW A (S=10:1)



SECTION B-B (S=3:1)