



ADM No. : _____

Messrs. Fujikura Fiber Optics Vietnam Ltd.

Purchase specification

Product Name : 1550nm 10dB Coupler

Product Type : CPL-C-10DB-3P

Signature on the receipt

Date



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1. General

1.1 Products Covered by this specification

This specification covers The High Reliability Submerged Optical Fiber Coupler.

The High Reliability Submerged Optical Fiber Coupler is called as "product" or just "coupler" hereafter.

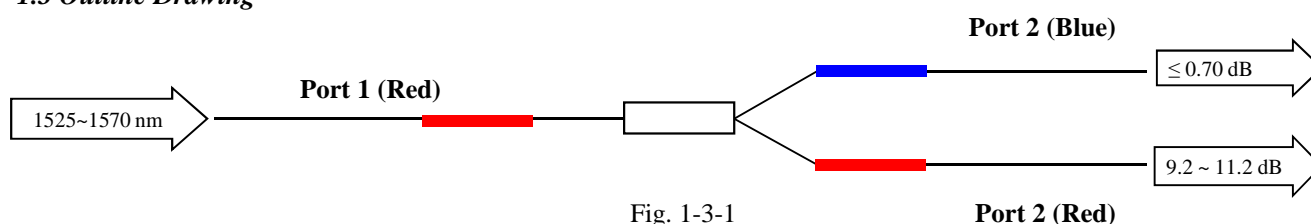
1.2 Product Name and Type

Product name and product type are shown below Table.1-2-1

Table. 1-2-1 Product Name and Type

Product Name	1550nm 10dB Coupler
Product Type	CPL-C-10DB-3P
Specification & Revision No.	B-19D3017
Customer Name	FiberHome Telecommunication Technologies Co., Ltd.
Application	High reliability submerged equipment

1.3 Outline Drawing



2. Specification

2.1 Environmental specification

The environmental specifications are specified in Table 2-1-1.

2.2 Dimensions

The dimensions are specified in Fig. 2-2-1~3 and Table 2-2-1.

2.3 Material

The materials are specified in Table 2-3-1.

Table 2-3-1. Material list

Name	Description	Remarks
Fiber	Fiber for submarine coupler (SM. 10/125. 03. UV)	D resin fiber (OFB0303) AOP86-0003-27-01
Clear Neoceram	N-0 2-410(8-6)/40-70 #800	04-IP-D6-40
UV resin	8700-7W	
Elastic resin D	KE-4896-T	AOP81-6001- 31-18
Elastic resin C	SU	AOP81-6001- 31-19
UV elastic resin	Loctite 5091	
FEP ultra thin tube	NFL021	
SUS pipe	Type-30-500	Laser printed
Marking Pen	Marks-a-Lot Red Marks-a-Lot Blue	
Packing case	Naname Pack	
Sponge for packing case		7-DRW-0624
Anti-static bag	Anti static bag TypeB	Size 350 x 470 (mm)
Shock Watch	L-35	

2.4 Optical specification

The optical specifications customer required are specified in Table 2-4-1.
The customer required Optical Test conditions & specifications are specified in Table 2-4-2.
The FIL checking process flow is specified in Fig. 2-4-1.

2.5 Process flow

The process flow outline is described in Fig 2-5-1.

2.6 Temperature cycle & Screening Test

Test conditions are specified in Table 2-6-1 & 2-6-2.
The sample condition of the Temperature cycle & Screening is shown in Fig. 2-6-1 & 2-6-2.
FOV must adjust the setting pattern of Temperature Cycle 24H to satisfy the Test Condition of Temperature Cycle 24H.
FOV must adjust the setting pattern of Screening 48H to satisfy the Test Condition of Screening 48H.

Key parameters and drifts shall be measured before and after the screening processes.

2.7 Elongation Length

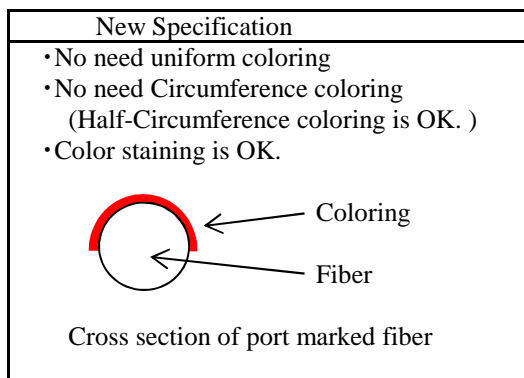
The Elongation Length must be within 11.0 +/-0.75mm (10.25 ~ 11.75 mm).

2.8 Measurement Uncertainty

The measurement uncertainty is shown in Table. 2-8-1.
You are responsible to demonstrate these values and maintain the calibration of its measurement instrumentation.
The limits in the present specification are absolute and do not take account of measurement uncertainty.
The limits will be indented by this uncertainty to ensure that product meets specification.

2.9 Fiber Coloring

It defines the specification of fiber coloring and colored fiber appearance.
The purpose of fiber coloring is to distinguish each port fiber.



3. Shipping requirement

3.1 Packing

The packing process is specified in Fig.3-1-1 ~ 10 and Table 3-1-1.

3.2 Deliverable Data

The deliverable data format for ODD is specified in Table 3-2-1 ~ 3.

The deliverable data format for CUSTOMER is specified in Fig. 3-2-1.

The deliverable electronic file data must be uploaded to the prescribed FTP server at least 5 working days before shipment.

<Details>

FOV sends the electronic data to ODD at least 5 working days before shipment.

ODD checks the measurement data, and gives approval to FOV at least 2 working days before shipment.

FOV ships the products after receiving ODD approval.

FOV	ODD	Comment
Make packing list and electronic data		
Send electronic data to ODD	→ Receive electronic data from FOV	At the very least 5 working days before the due date to send off products from FOV
	Check electronic data	
Get approval	← Give approval to FOV (If there is something wrong, inform the result to FOV)	At least 2 working days before shipment
Shipping		

Basically, the submission date of electronic data is set as 5 working day before shipment.

FOV informs ODD in advance and sends electronic data to ODD as soon as possible in special case.

Each PIC at FOV and ODD makes adjustments in detail before shipping.

3.2.1 Format of Display Form in Electronic TR Format: PDF

The format of display form in test report is defined in Table 3-2-1-1.

Table 3-2-1-1. Explanation of Parameter in Fig 3-2-1

Parameter	Display Form	Comment		
Test Date	yyyy/mm/dd	Final Inspection Day (yyyy: year, mm: month, dd: date)		
IL_P12	###	Insertion Loss	P1 -> P2	
IL_P13	###		P1 -> P3	
PDL_P12	###	Polarization Dependent Loss	P1 -> P2	
PDL_P13	###		P1 -> P3	
ExL_P1	###	Excess Loss	Input Port1	

*1: Insertion Loss, Polarization Dependent Loss, Return Loss: measurement data at room temperature

3.2.2 Electronic TR Format: PDF

TR Format is shown in Fig 3-2-1.

File Name: serial_number.pdf [Example: FAC200141.pdf]

3.3 Packing List

The format of Packing List that is attached in each carton box is specified in Table 3-3-1.

3.4 List of Serial Number with bar code

The format of List of Serial Number with bar code that is attached in each carton box is specified in Table 3-4-1.



4. Build standard control & Key documents

4.1 Build Standard control

Any part of the device, fabrication and testing procedure, either listed in the Key Document List, cannot be changed without prior written consent from Fujikura.

Any major change in the build standard must be discussed at least six months prior to its intended implementation. If the changes will involve changes in external parts, such as fiber pigtail, package dimensions, etc., the FOV will supply samples of the new part at least 6 months in advance. The FOV is responsible to fulfil orders (at the current shipping rate) without any changes for six months following the notification of the intended change in the build standard.

4.2 Key Document List

The FOV shall list, in the Quality Plan, all specifications used during the manufacture and inspection of couplers for Fujikura showing quality control points during the total manufacturing process. These shall include as a minimum: manufacturing/assembly operations; inspections; component testing; device aging and screening.

The FOV shall generate, with Fujikura, a list of documents that are mutually agreed to be key document list. These documents may not be changed or deviated from without the written consent of Fujikura, with the exception of editorial changes, which may be performed at the manufacturer's discretion. The issue level of all key documents shall be reviewed during bill of document reviews.

5. QUALITY ASSURANCE REQUIREMENTS

5.1 Reliability Assurance

Systems installed by our customer are required to operate for periods of twenty-nine years: 29 years with the absolute minimum of repair or maintenance.

The reliability assurance requirement for the component covered by this specification is less than 0.1 FIT (UCL 60%) over 29 years.

A failure is a device whose Insertion Loss shift outside the limits given in the optical specification section, at any time during its 29 year life.

The ambient operating temperature range over which this reliability assurance requirement applies is 0 to 45°C.

5.2 Traceability

Fujikura shall have access to all piece parts and process control records, individual measurements, failure rate predictions, failure analysis reports and other documentation relevant to the Qualification Approval and Acceptance of all products used in, or considered for use in, Submerged Repeater Systems.

All the measurements data, screening, and predictions relevant to the parameters listed in this specification must be archived by the FOV and available for inspections for 29 years from the date of shipment.

The following table defines a minimum set of records:

Manufacturing records and Process control data
Traceability of raw materials and parts
History of 4M changes
Software/Program revision history
All audits carried out by the FOV on their own processes and those of their sub-contractors, plus records of all corrective actions resulting from audits, whether carried out internally or by external parties.
Test and measurements results
Failure analysis reports
Life test and qualification data
Screening results and predictions

5.3 *Qualification of Operator*

The operators in charge of each process (inc. special process) must pass the qualification test and be approved by FOV's qualification system of operator's skill.

5.4 *Periodical Performance Test*

To confirm the making process condition, we are going to test the production quality called "Periodical Performance Test" in FJK.

FJK will issue the non commercial order, FOV should send the test samples to FJK.

Frequency 5pcs/ 12month

Test item Optical characteristics, Vibration test, Impact test, Pull test, etc.

5.5 *Case of past troubles*

FOV must prepare/organize the cases of past troubles about coupler production.

And when FOV accepts new persons (engineers, operators, staffs etc.), they have to be educated with the cases of past troubles.

5.5 *Statistic Control*

To control the manufacturing condition/status of production line,

- FOV has to report about the Process Capability every month using with the process loss inspection data.
- FOV has to make some control charts every week using with the process loss inspection data.

To control the optical characteristics of manufacturing products statistically,

FOV has to monitor the following characteristics by simple moving average each 10 and 100 devices.

Moreover FOV has to feed back the monitor results to the elongation process

to keep the average spec of optical characteristics.

- Insertion Loss
- Polarization Dependent Loss
- FIL

Table 2-1-1 Environmental specification

	Item	Specification			Notes
1	Operating Condition for CPL Clean Room	Temperature	°C	20 ~ 26	Fed. Std. 209D
		Humidity	%RH	10 ~ 90	
		Cleanliness Class	P/ft ³	Class 5,000	
2	Storage condition Packing device	Temperature	°C	-20 ~ 70	for 2 weeks
		Humidity	%RH	0 ~ 90	
		Temperature	°C	15 ~ 30	for 27 years
		Humidity	%RH	0 ~ 50	
3	Storage condition Unpacking device	Temperature	°C	15 ~ 30	for 2 weeks
		Humidity	%RH	0 ~ 50	
		Cleanliness Class	P/ft ³	Class 100,000	Fed. Std. 209D
		Temperature	°C	-20 ~ 50	for 27 years
		Humidity	%RH	0 ~ 20	
		Cleanliness Class	P/ft ³	Class 100,000	Fed. Std. 209D
4	Clean Bench for Elongation	Cleanliness Class	P/ft ³	Class 1,000	Fed. Std. 209D
5	Drop Test	Height	cm	4.8 ~ 5.2	
		Times	times	100	

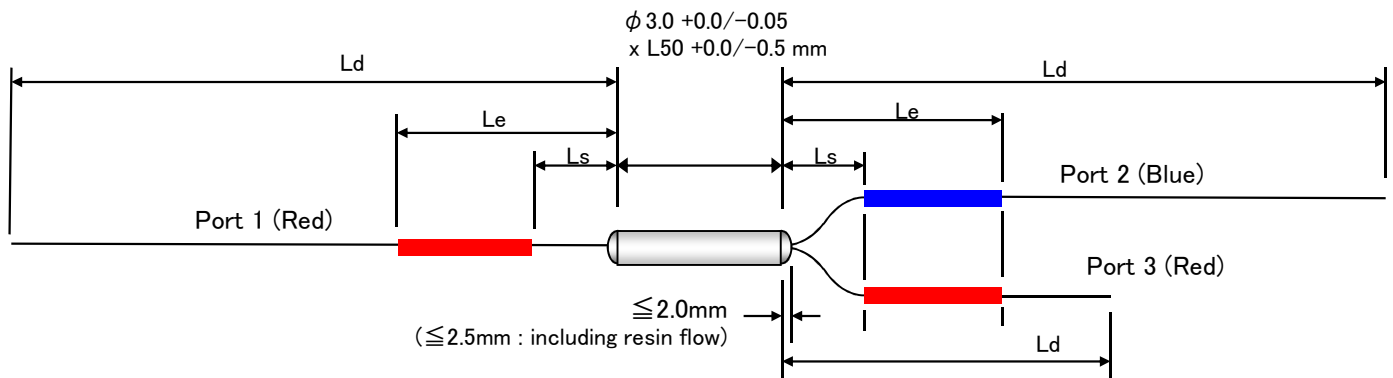


Fig. 2-2-1. Coupler outside drawing

Table 2-2-1. Port configuration

unit : mm

Port	Color	Ls	Le	Ld
Port 1	Red	80 ~ 120	460 ~ 540	5050 ~ 5500
Port 2	Blue	80 ~ 120	460 ~ 540	5050 ~ 5500
Port 3	Red	80 ~ 120	460 ~ 540	2050 ~ 2500



Fig. 2-2-2. Label printing on SUS pipe
(*****: numeric character)



Fig. 2-2-3. Label printing on SUS pipe

Note:

All dimensions and tolerances is in millimeters.

Table. 2-4-1 Customer required Optical specification

Item	unit		Specification		Remarks
			min	Max	
Operating wavelength	nm		1525	~ 1570	
Insertion Loss (IL)	dB	P1→P2		≤ 0.70	Including PDL, WDL
		P1→P3	9.20	~ 11.20	
Polarization Dependent Loss (PDL)	dB	P1→P2		≤ 0.04	
		P1→P3		≤ 0.20	
Return Loss (RL)	dB	Port 1	50	≤	$\lambda = 1550 \text{ nm}$ Port1: by design
		Port 2, 3	50	≤	$\lambda = 1550 \text{ nm}$ Port1: by design
Excess Loss (ExL)	dB	P1		≤ 0.20	

Table. 2-4-2 Customer required Optical Test condition & specification

Item	unit		Specification		Remarks
			min	Max	
Operating wavelength	nm		1525	~ 1570	
Insertion Loss (IL)	dB	P1→P2		≤ 0.68	*1, 3)
		P1→P3	9.25	~ 11.15	*1, 3)
Temperature Dependent Loss (TDL)	dB	P1→P2		≤ 0.05	*2, 3) Sampling: 5% / shipping
		P1→P3		≤ 0.15	*2, 3) Sampling: 5% / shipping
Polarization Dependent Loss (PDL)	dB	P1→P2		≤ 0.035	*1, 3)
		P1→P3		≤ 0.17	*1, 3)
Return Loss (RL)	dB	Port 2	51	≤	$\lambda = 1550 \text{ nm}$ *1)
		Port 3	51	≤	
Excess Loss (ExL)	dB	P1		< 0.18	*1, 3)
Fluctuation in Insertion Loss (FIL) *6)	dB	P1→P2	-0.060	~ 0.060	*1, 3)
		P1→P3	-0.080	~ 0.080	*1, 3)

*1) Measurement temperature : 23℃

*2) Measurement temperature : 0℃, 23℃, 45℃

*3) Measurement wavelength : 1525.0 ~ 1570.0nm : $\lambda = 1525.0, 1550.0, 1570.0 \text{ nm}$

*4) IL fluctuation : Compare the IL before and after screening at the same wavelength.

Table. 2-8-1 Measurement Uncertainty

Parameter			Uncertainty
Insertion Loss (IL)	dB	P1→P2	±0.02 dB
		P1→P3	±0.05 dB
Polarization Dependent Loss (PDL)	dB	P1→P2	±0.005 dB
		P1→P3	±0.03 dB
Return Loss (RL)	dB		±1 dB

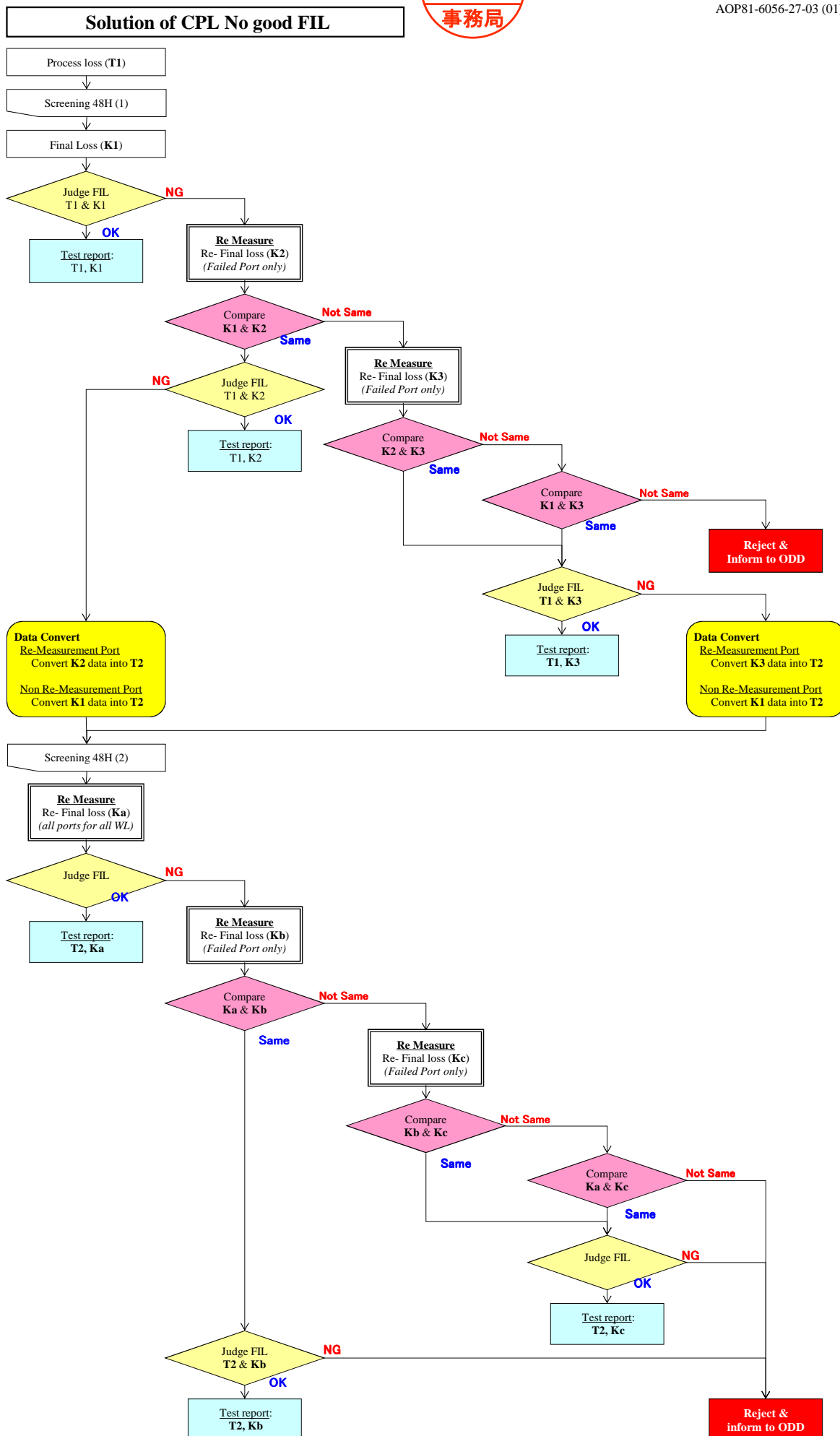


Fig. 2-4-1 FIL checking process flow

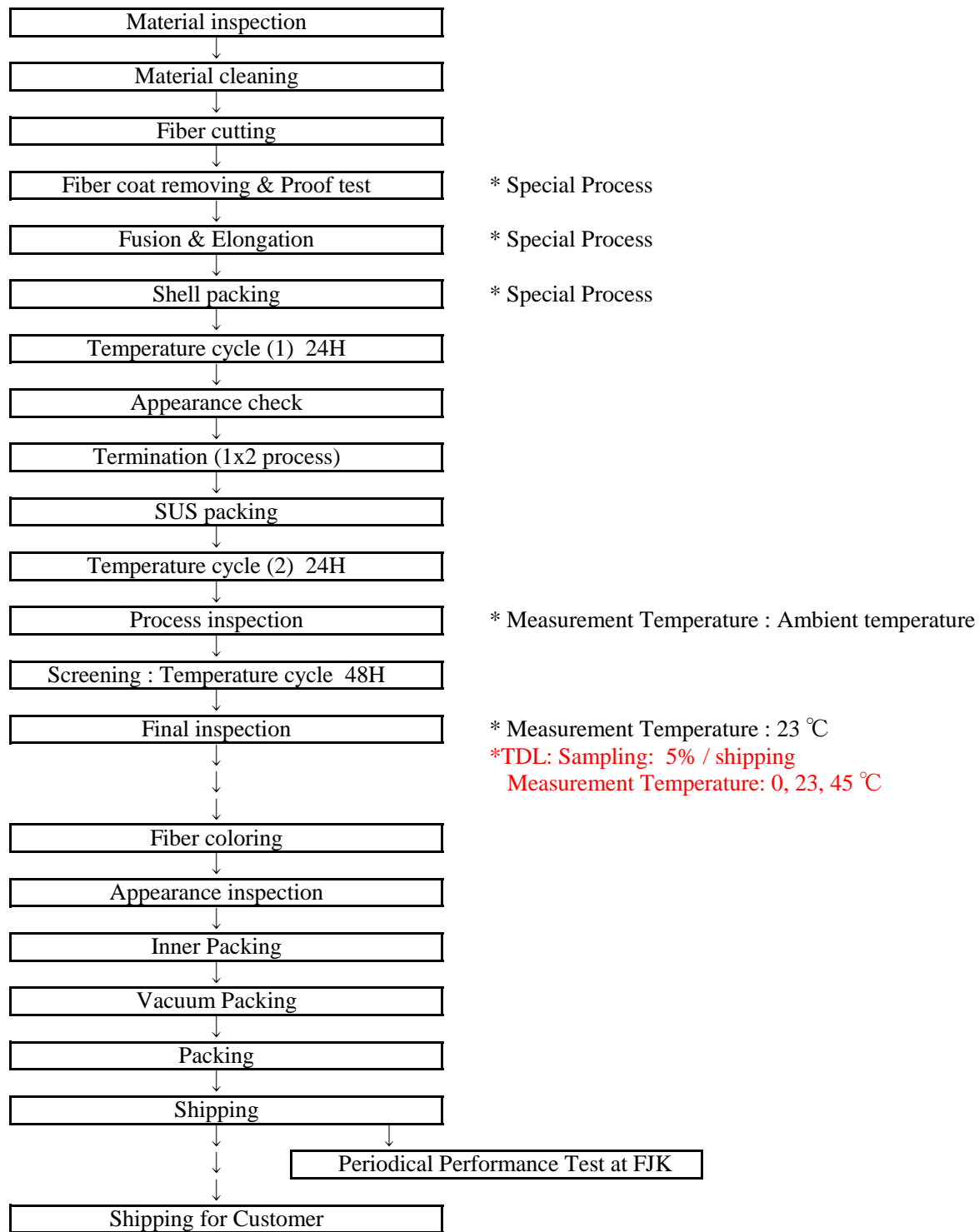
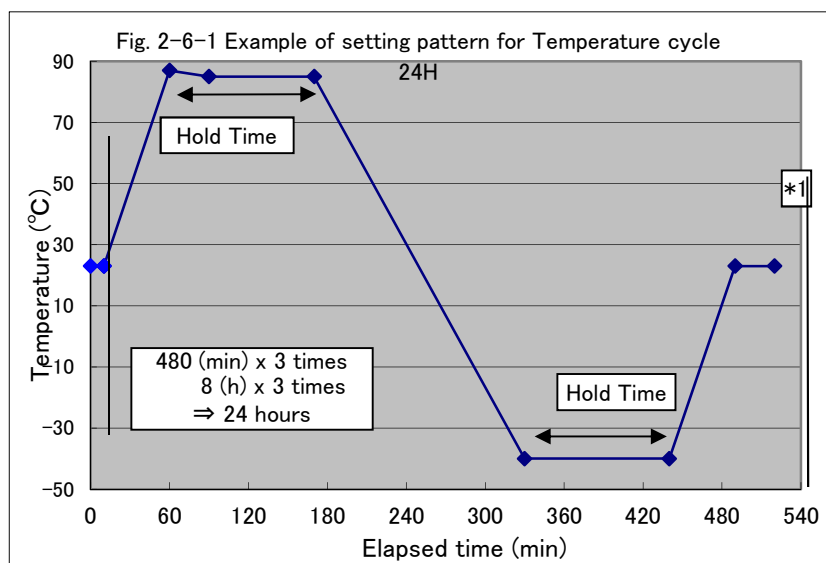


Fig. 2-5-1 Process flow outline

•Temperature cycle 24H

Table 2-6-1 Condition of Temperature cycle 24H

Temperature Range	-40 / +85 °C
Time	8 hours / cycle
Total time	24 hours (3 cycles)
Holed time	more than 1 hour



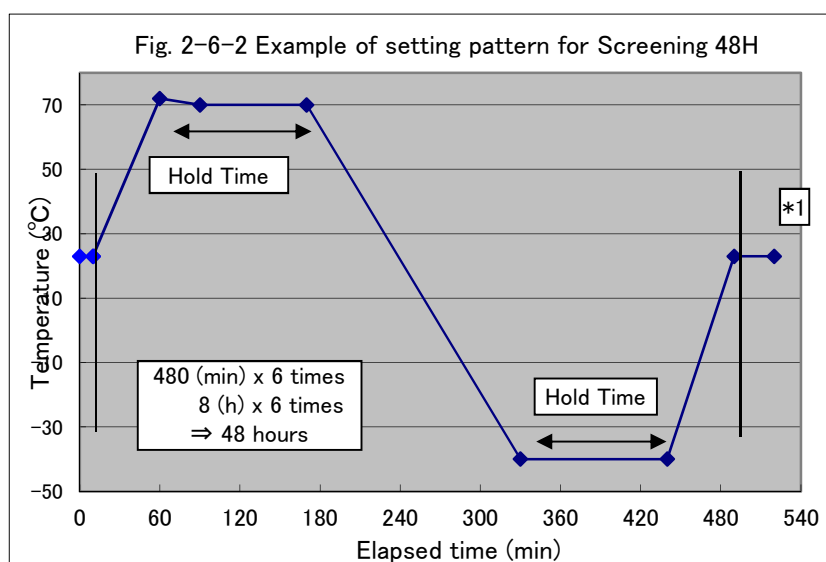
Temperature Time		Elapsed Time		
(°C)		(min)	(min)	
From	To			
23	23	10	10	
23	87	50	60	
87	85	30	90	
85	85	80	170	
85	-40	160	330	
-40	-40	110	440	
-40	23	50	490	
23	23	30	520	Hold 30 min at 23°C *1

Repeat 3 times (480x3)

•Screening 48H (Temperature cycle 48H)

Table 2-6-2 Condition of Screening 48H

Temperature Range	-40 / +70 °C
Time	8 hours / cycle
Total time	48 hours (6cycles)
Holed time	more than 1 hour
Criteria	FIL (P1→P2) -0.060 ~ 0.060 dB FIL (P1→P3) -0.080 ~ 0.080 dB



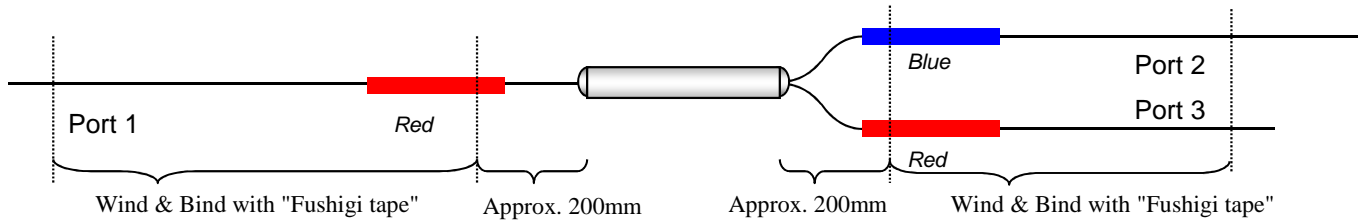
Temperature Time		Elapsed Time		
(°C)		(min)	(min)	
From	To			
23	23	10	10	
23	72	50	60	
72	70	30	90	
70	70	80	170	
70	-40	160	330	
-40	-40	110	440	
-40	23	50	490	
23	23	30	520	Hold 30 min at 23°C *1

Repeat 6 times (480 x 6)

*1 : To prevent the dew condensation

Note :

If you can not keep the Hold Time minimum 1 hour, you have to modify the setting pattern.



Bind port fibers with Fushigi tape.

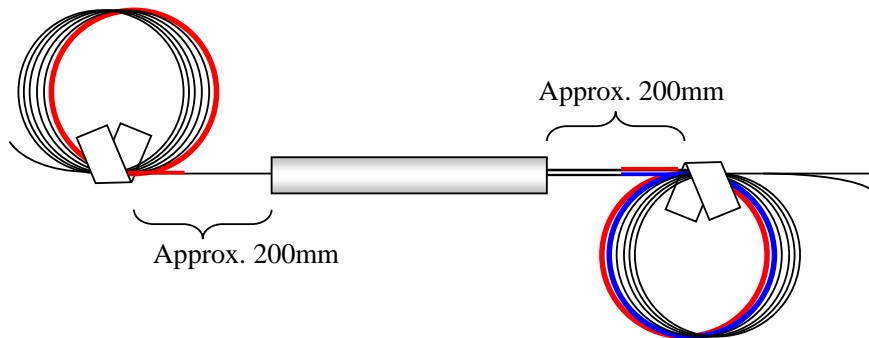
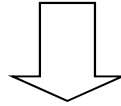


Fig. 3-1-1 Outline of port fiber binding

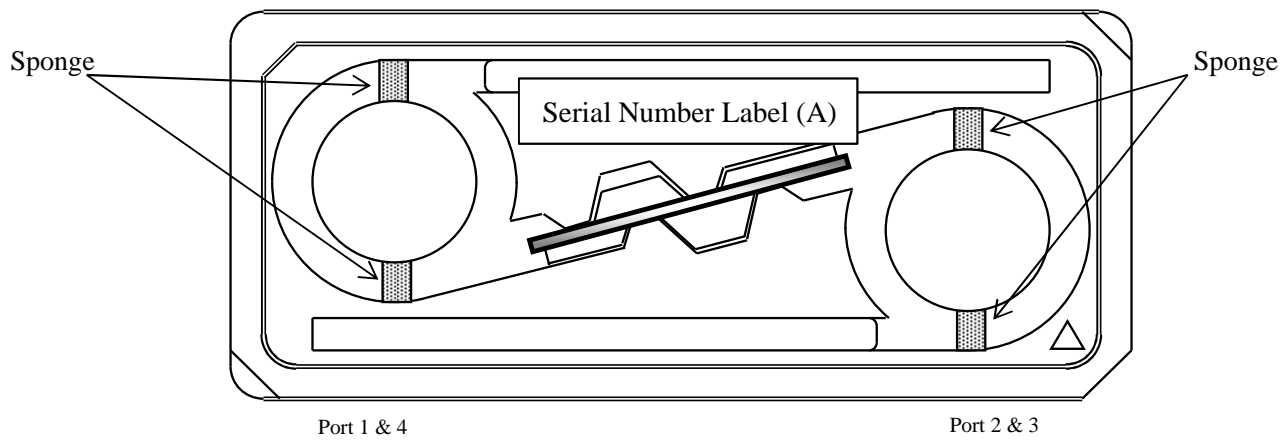
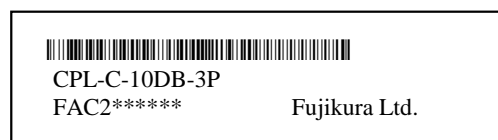


Fig.3-1-2 Appearance of packing case



Minimum requirement of serial number label (A)

Format of Bar code ("Product type" + " " + "Serial number"; Code 128 without check digit)

Product type

Serial number Fujikura Ltd.

Fig.3-1-3 Sample format of Serial number label (A) on inner package

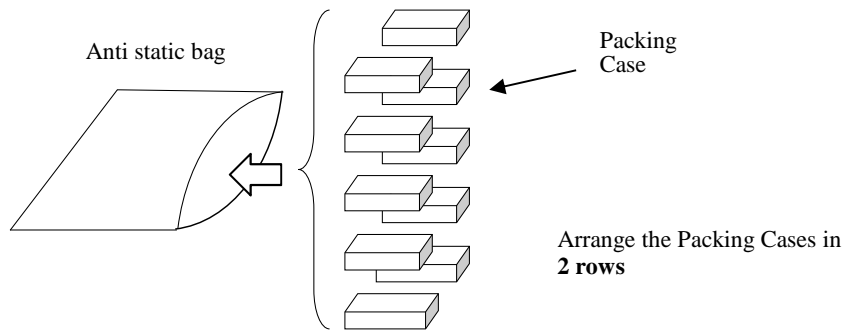


Fig.3-1-4

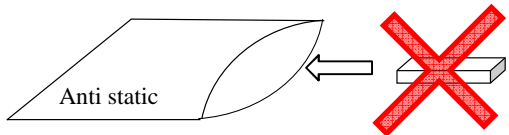


Fig. 3-1-4-a Basic way of packing the case into the anti static bag: Q'ty of Packing Case = 1

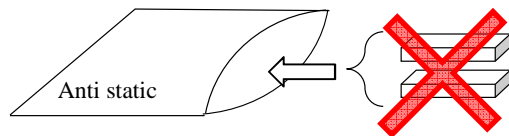
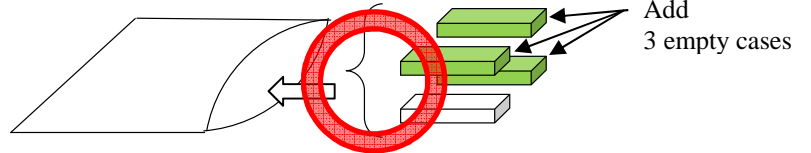


Fig. 3-1-4-b Basic way of packing the case into the anti static bag: Q'ty of Packing Case = 2

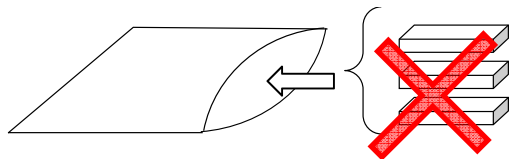
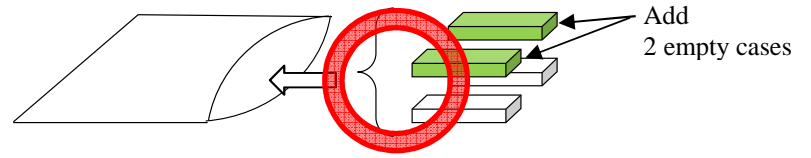


Fig. 3-1-4-c Basic way of packing the case into the anti static bag: Q'ty of Packing Case = 3

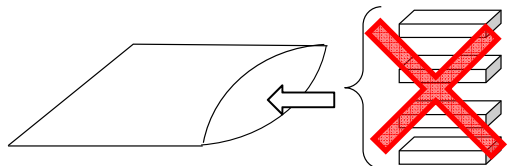
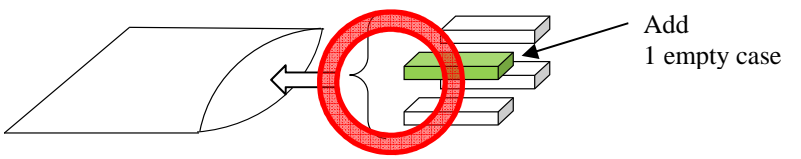


Fig. 3-1-4-d Basic way of packing the case into the anti static bag: Q'ty of Packing Case = 4, 6, 8, 10: Example) Q'ty = 4

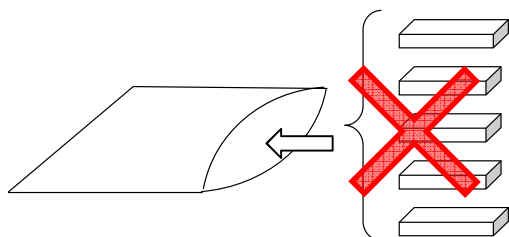
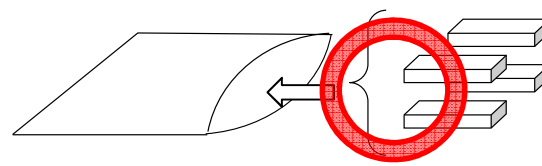
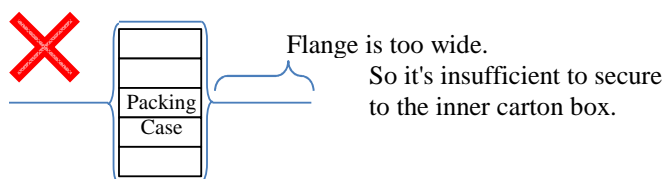
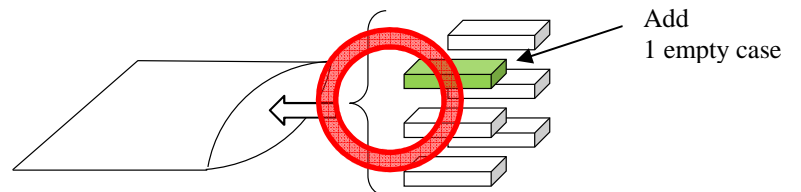
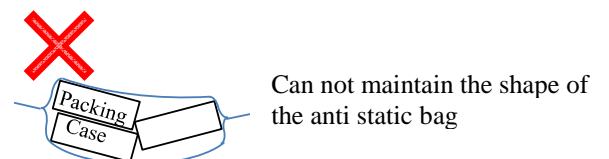


Fig. 3-1-4-e Basic way of packing the case into the anti static bag: Q'ty of Packing Case = 5, 7, 9: Example) Q'ty = 5



a) Pack in a vertical row(Max 5 cases)



b) Unbalance number of Packing case

Fig. 3-1-4-f Improper packing way (Bad Examples: 2 samples)

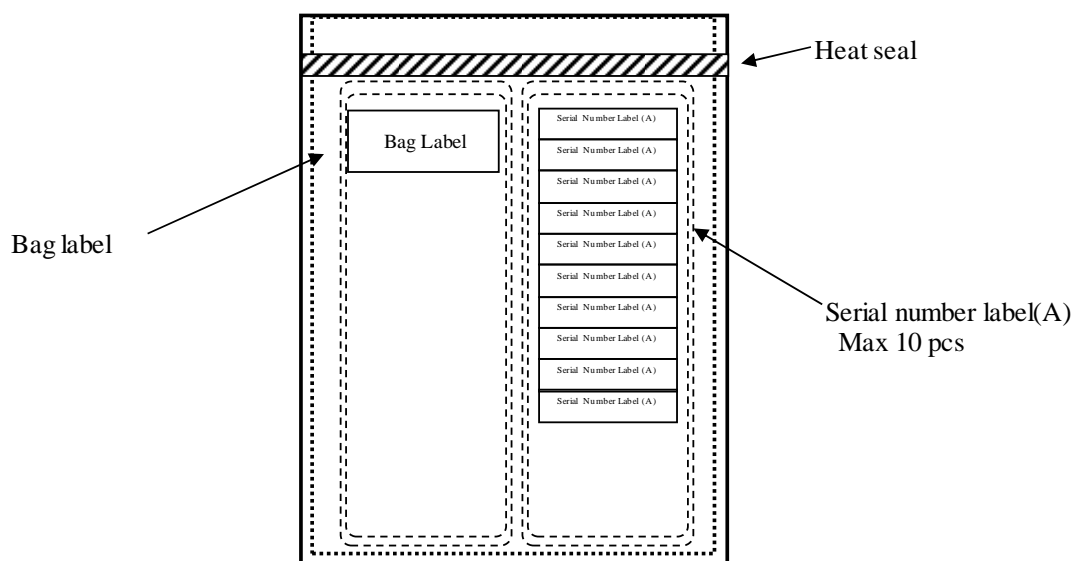



Fig. 3-1-5 Attaching position of the bag label & the serial number label(A) on the anti-static bag

Product Type	CPL-980/C-WDM-3P
 (*1)	
P/O No.	
Quantity (pcs)	
Bag No. / Total Bag	Date:

(*1) : Format : "P/O Number" + " - " + "Bag No." + "/" + "Quantities in Bag"
Bar code type : code128 without check digit

Fig. 3-1-6 Example of Bag label Format

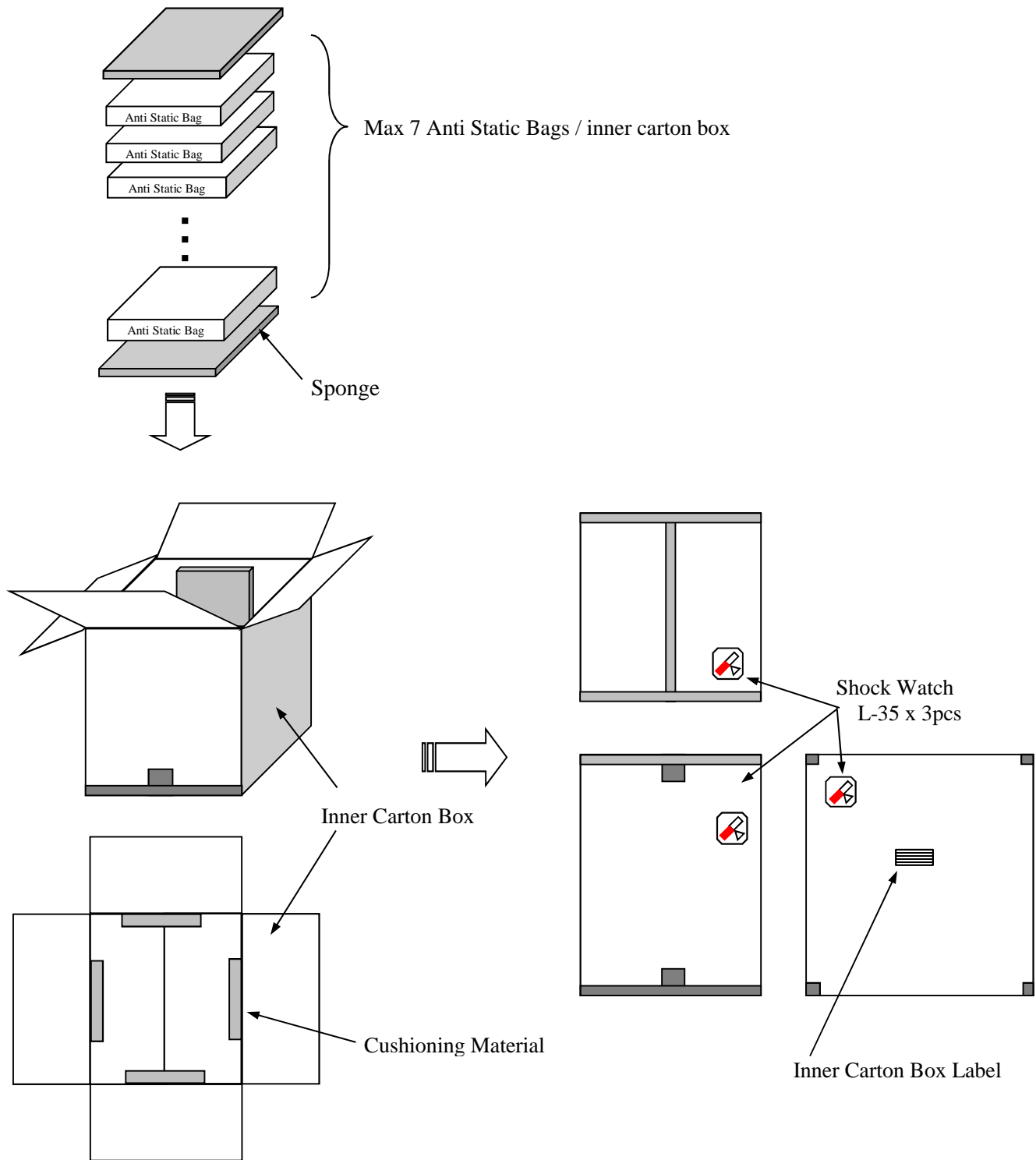


Fig. 3-1-7 The way to pack the products into inner carton box

Product Type	CPL-C-10DB-3P
	(*)
P/O No.	
Quantity (pcs/Box)	
Carton No. / Total.	Date:

(*) : Format : "P/O Number" + " - " + "Carton No." + "/" + "Total box" + "Quantities in Box"
Bar code type : code128 without check digit

Fig. 3-1-8 Example of Inner carton box label format

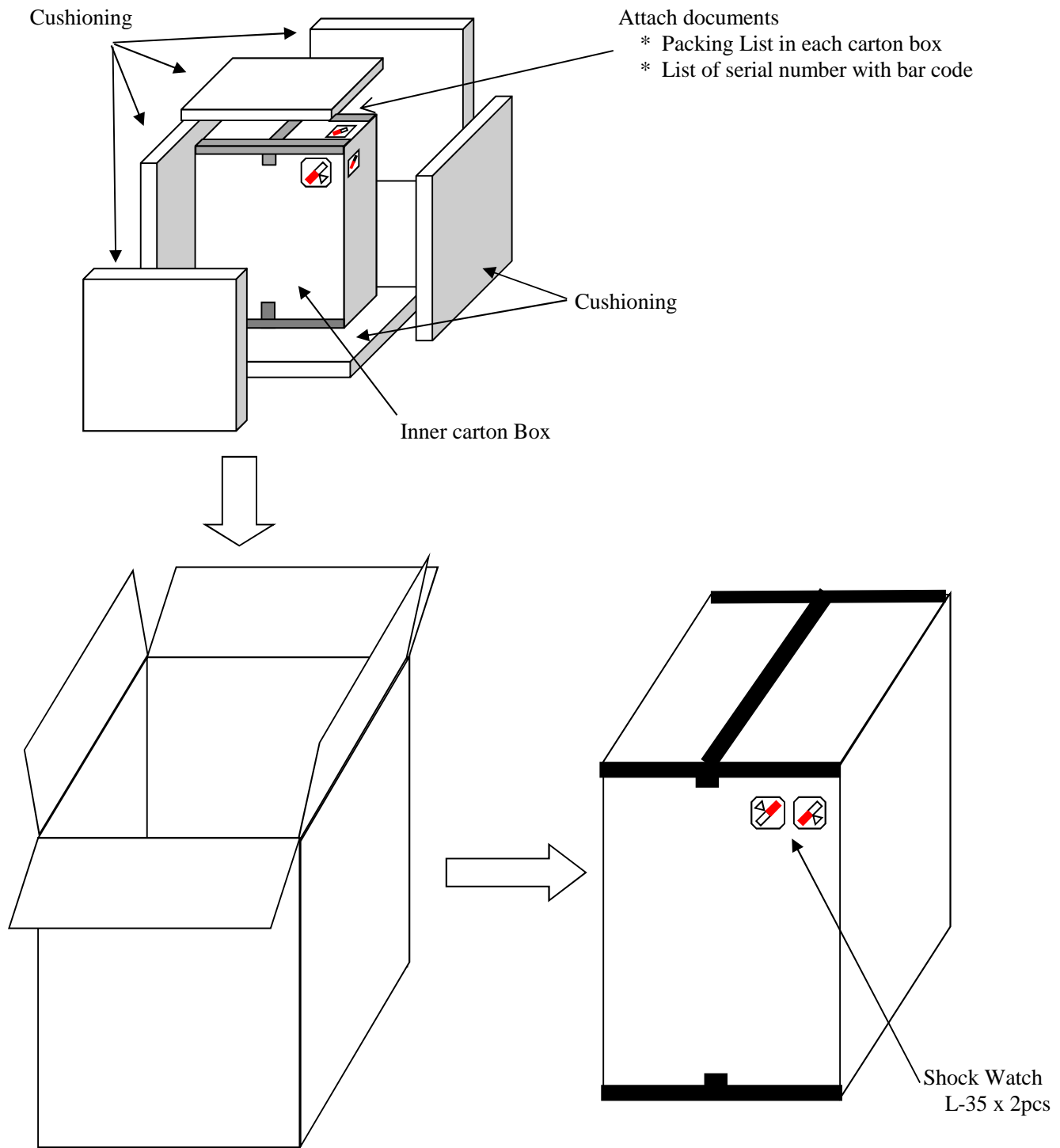


Fig. 3-1-9 Packing in outer carton box

Table 3-1-1. Packing condition with pallet

Outer carton box Q'ty	1	2	3	4	5	6	7	8
Pallet type	PAL0003		PAL0006					
Max Layer	1				2			

<p>Outer Carton Box</p> <p>Q'ty = 1 ~ 2</p> <p>Pallet type PAL0003</p>	 
<p>Q'ty = 3 ~ 8</p> <p>Pallet type PAL0006</p>	 

Fig 3-1-10. Example of pallet loading

Table 3-2-1. Deliverable data format : Measurement raw data

kind	opa	cpl_no	process	in_port	meas_num	ws_num	ws	date_st (*1)	date_end (*2)	meas_time	station	worker	meas_id	cross_sw
t1	t2	t3	ws_il	il_t1	il_t1_cross	il_t2	il_t2_cross	il_t3	il_t3_cross	pdl_t1	pdl_t1_cross	pdl_t1_mon		
pdl_t2	pdl_t2_cross	pdl_t2_mon	pdl_t3	pdl_t3_cross	pdl_t3_mon	pdl_splice	pdl_splice_cross	exloss_t1	exloss_t2	exloss_t3	iso_t1	iso_t2	iso_t3	
coupling_t1	coupling_t2	coupling_t3	w_peak_t1	w_peak_t2	w_peak_t3	ws_ct	ct_t1	ct_t2	ct_t3	ct_splice	judge_score	judge_total		
spec_id	il_fit_ws	il_t1_fit	il_t2_fit	il_t3_fit	pwr_init	pwr_init_cross	pwr_init_mon	pout_t1	pout_t1_cross	pout_t1_mon				
pout_t2	pout_t2_cross	pout_t2_mon	pout_t3	pout_t3_cross	pout_t3_mon	p0	p0_mon	p0_cross	p0_cross_mon					
mon_diff_t1	mon_diff_t2	mon_diff_t3	prog_ver	prog_no	laser	enshin	ensin_worker	enshin_il						
enshin_ct	pwr_stab	pwr_stab_cross	yobi1	yobi2	Finish	id								

*1 date_st format is YYYY/MM/DD hh:mm:ss

*2 date_end format is YYYY/MM/DD hh:mm:ss

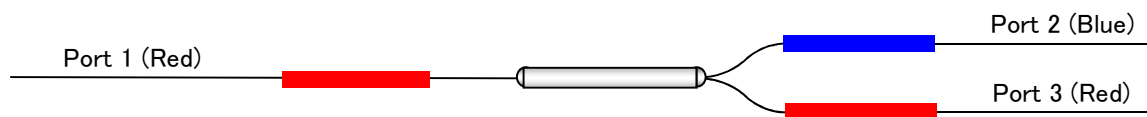
Note:

Deliverable data should be available with Microsoft(R) Excel 2000.

Table 3-2-2. Deliverable data format : Return Loss

[illegible]

*1 Port configuration as below (Customer configuration. Not FOV configuration)



*2 Shipping date format as below

YYYY/MM/DD

Note:

Deliverable data should be available with Microsoft(R) Excel 2000.



Table 3-2-3. Deliverable data format : Relation table between CPL name and SUS pipe No.

No	CPL Name	SUS Pipe No	Fiber Lot No.	Customer Name	PO	Specification	Shipping date (*1)	Remarks

*1 Shipping date format as below

YYYY/MM/DD

Note:

Deliverable data should be available with Microsoft(R) Excel 2000.

Test Report

Product Name: 1550nm 10dB Coupler

Product Type CPL-C-10DB-3P

Serial Number:

Fiber Lot:

Test Date (MM-DD-YYYY):

Test Temperature:



[Serial No]

Parameter	Specification (dB)	Wavelength (nm)	Measured (dB)	Judge
IL_P12	≤ 0.70	1525.0		Pass / Fail
IL_P12	≤ 0.70	1550.0		Pass / Fail
IL_P12	≤ 0.70	1570.0		Pass / Fail
IL_P13	9.2 ~ 11.2	1525.0		Pass / Fail
IL_P13	9.2 ~ 11.2	1550.0		Pass / Fail
IL_P13	9.2 ~ 11.2	1570.0		Pass / Fail
PDL_P12	≤ 0.04	1525.0		Pass / Fail
PDL_P12	≤ 0.04	1550.0		Pass / Fail
PDL_P12	≤ 0.04	1570.0		Pass / Fail
PDL_P13	≤ 0.20	1525.0		Pass / Fail
PDL_P13	≤ 0.20	1550.0		Pass / Fail
PDL_P13	≤ 0.20	1570.0		Pass / Fail
ExL_P1	≤ 0.20	1525.0		Pass / Fail
ExL_P1	≤ 0.20	1550.0		Pass / Fail
ExL_P1	≤ 0.20	1570.0		Pass / Fail

Note) Bar cord type: code128 without check digit

File Type :

File Name :

Fig 3-2-1. Format of Electronic Test Report (PDF)

Test Report

Product Name: 1550nm 10dB Coupler
Product Type CPL-C-10DB-3P
Serial Number: FAC2011054
Fiber Lot: SK1410011E-*****-*****
Test Date (MM-DD-YYYY): MM-DD-YYYY
Test Temperature: 23°C



Parameter	Specification (dB)	Wavelength (nm)	Measured (dB)	Judge
IL_P12	≤ 0.70	1525.0	0.41	Pass
IL_P12	≤ 0.70	1550.0	0.43	Pass
IL_P12	≤ 0.70	1570.0	0.41	Pass
IL_P13	9.2 ~ 11.2	1525.0	10.50	Pass
IL_P13	9.2 ~ 11.2	1550.0	10.70	Pass
IL_P13	9.2 ~ 11.2	1570.0	10.50	Pass
PDL_P12	≤ 0.04	1525.0	0.01	Pass
PDL_P12	≤ 0.04	1550.0	0.01	Pass
PDL_P12	≤ 0.04	1570.0	0.01	Pass
PDL_P13	≤ 0.20	1525.0	0.09	Pass
PDL_P13	≤ 0.20	1550.0	0.09	Pass
PDL_P13	≤ 0.20	1570.0	0.09	Pass
ExL_P1	≤ 0.20	1525.0	0.08	Pass
ExL_P1	≤ 0.20	1550.0	0.08	Pass
ExL_P1	≤ 0.20	1570.0	0.08	Pass

Note) Bar cord type: code128 without check digit

Fig 3-2-2. Format of Electronic Test Report (PDF)

Packing List

FOV Purchase Order Number: Customer Purchase Order Number: Certificate date (yyyy-mm-dd) :	<div style="border: 1px solid black; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; height: 20px;"></div>
--	--

To:
 FiberHome Telecommunication Technologies Co., Ltd.

From: Fujikura Fiber Optics Vietnam Ltd.
 9-11 VSIP 1 St. 6, Vietnam Singapore Industrial
 park, Binh Hoa Ward, Thuan An Town, Binh
 Duong Province, Vietnam.

This document certify that the products listed below have been produced in accordance with your purchase order and the correspondent specifications.

Product Name	Product Type	Quantity	Remarks

Signed by: _____

Manager of
Quality Assurance Section
Fujikura Fiber Optics Vietnam Ltd.

Note: (1): Fujikura's PO No

(2): Customer's PO No

(3): The working day of packing process: Format yyyy-mm-dd

Fig 3-3-1. Sample Format of Packing List (paper size : A4, Portrait orientation)

Packing List

FOV Purchase Order Number: 12345678-9 Customer Purchase Order Number: 123-456789-0123 Certificate date (yyyy-mm-dd) : 2020-07-20	
--	--

To:
 FiberHome Telecommunication Technologies Co., Ltd.

From: Fujikura Fiber Optics Vietnam Ltd.
 9-11 VSIP 1 St. 6, Vietnam Singapore Industrial
 park, Binh Hoa Ward, Thuan An Town, Binh
 Duong Province, Vietnam.

This document certify that the products listed below have been produced in accordance with your purchase order and the correspondent specifications.

Product Name	Product Type	Quantity	Remarks
1550nm 10dB coupler	CPL-C-10DB-3P		-

Signed by: _____















Tran Nguyen Minh Duc.
Manager of
Quality Assurance Section
Fujikura Fiber Optics Vietnam Ltd.

Fig 3-3-2. Example of Packing List

		
Serial No	Serial No		Serial No
		
Serial No	Serial No		Serial No
		
Serial No	Serial No		Serial No
.	.		.
		
Serial No	Serial No		Serial No
		
Serial No	Serial No		Serial No
		
Serial No	Serial No		Serial No

Note) Bar cord type: code128 without check digit

Fig 3-4-1. Example Format of List of serial number with barcode label (paper size : A4, Portrait orientation)

		
FAC2010131	FAC2010141		FAC2010191
		
FAC2010132	FAC2010142		FAC2010192
		
FAC2010133	FAC2010143		FAC2010193
.	.		.
		
FAC2010138	FAC2010148		FAC2010198
		
FAC2010139	FAC2010149		FAC2010199
		
FAC2010140	FAC2010150		FAC2010200

Note): No need to sort the serial numbers, when you make a list of serial number with bar code label,
Bar code type : code128 without check digit

Fig 3-4-2. Example of List of serial number with barcode label