

HYAS0175214A



Standard Specification
for
CWDM 4ch Mux (SC/SPC)

Prepared by K. Kitayama Feb/01/2002
Kazuko Kitazawa/Engineer

Approved by Y. Suetsugu Feb/4/2002
Yoshiyuki Suetsugu/Manager

 SUMITOMO ELECTRIC INDUSTRIES, LTD

1. General

This document covers the standard specification of CWDM 4ch Mux.

2. Construction

Construction is shown in Figure 1.

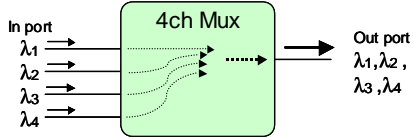


Figure 1. Construction of CWDM 4ch Mux

3. Optical Specification

Parameter	Unit	Specification
Channel Spacing	nm	20
Central Wavelength (λ_c)	nm	4 channel from 1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611
Passband	nm	$\lambda_c \pm 6.5$
Insertion Loss	Max. dB	3.1
Passband Flatness	Max. dB	0.5
Channel Uniformity	Max. dB	1.2
Directivity	Min. dB	50
Return Loss	Min. dB	40
Polarization Dependent Loss	Max. dB	0.15
Operating Temperature	°C	0 to 65
Storage Temperature	°C	-40 to 85
Package Dimension	mm	135x 100x 10

4. Other Specification

Parameter	Specification
Fiber	900 μ m loose tube
Fiber Length	1 \pm 0.1m
Connector	SC/SPC

5. Test Reports

A test report is provided with each product including the following measured data:

- Insertion Loss
- Return Loss
- PDL

6. Ordering Information

SE - CW 4 ch M x 0 - S / SP - C - L 1 0

● Central Wavelength

[◆◆: Number representing shortest wavelength]

(ex) 47: 1471nm, 1491nm, 1511nm, 1531nm

49: 1491nm, 1511nm, 1531nm, 1551nm

7. Definition

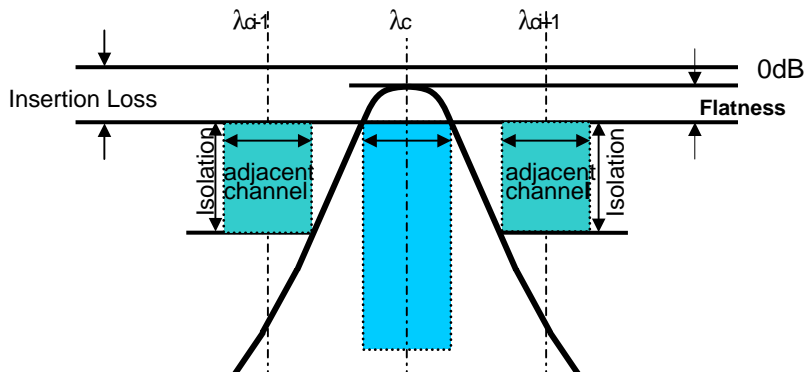


Figure2 Definition of parameters

The parameters herein take into account temperature variations over the operating temperature range.

Insertion Loss

This describes the maximum insertion loss value from the zero dB point over the entire passband $\lambda_c \pm 6.5\text{nm}$ within each central wavelength channel.

Passband Flatness

It is a measure of the difference in dB between the minimum and maximum insertion loss in each channel port over the entire passband $\lambda_c \pm 6.5\text{nm}$.

Channel Uniformity

It is a measure of the difference in dB between the minimum and the maximum insertion loss across all channels.

Polarization Dependent Loss (PDL)

PDL is defined as the maximum difference in insertion loss over the passband $\lambda_c \pm 6.5\text{nm}$ for all states of polarization.

Directivity

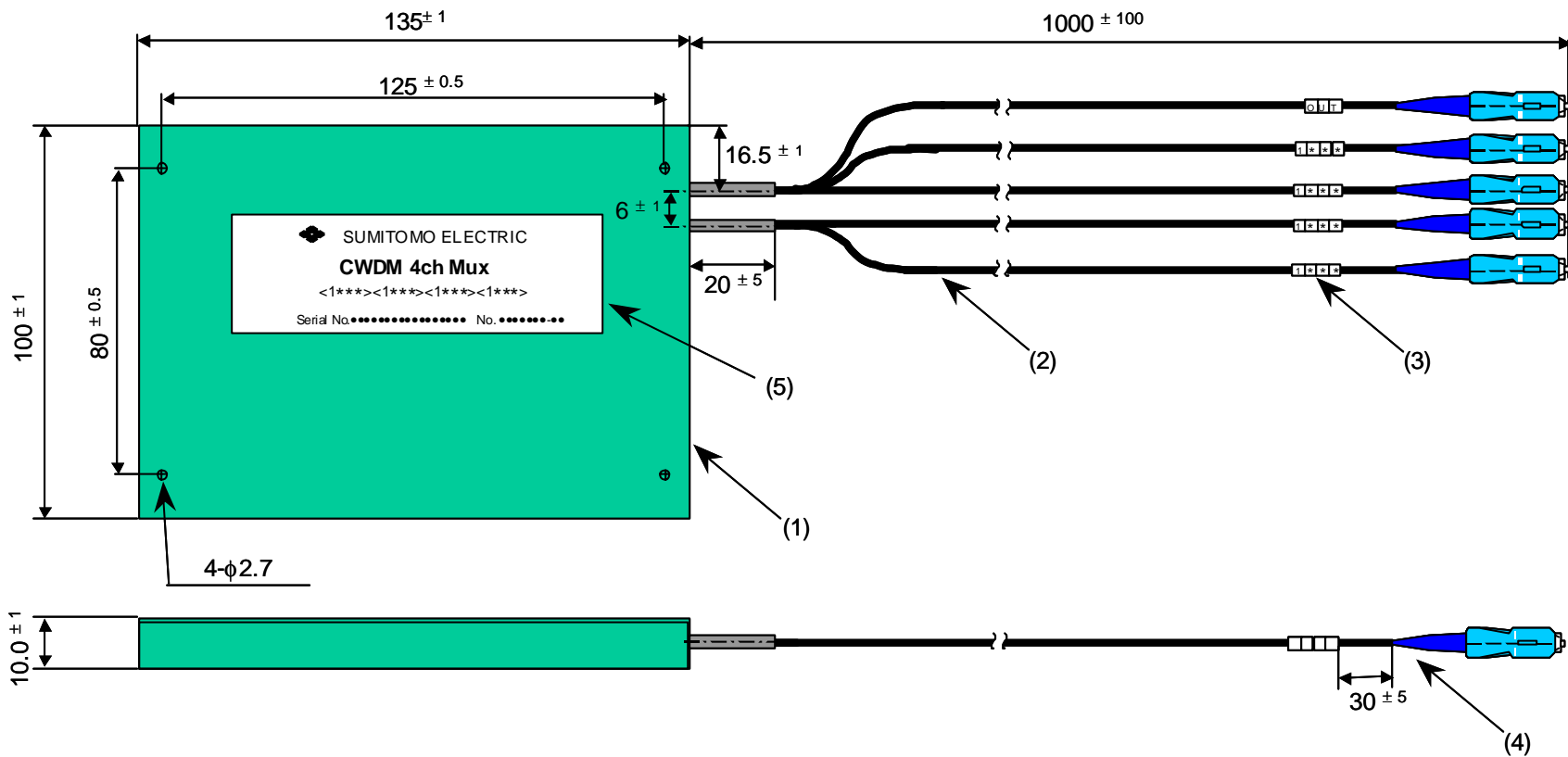
The directivity is the amount of unwanted signal that appears in one input channel when light is launched into another input channel over the passband $\lambda_c \pm 6.5\text{nm}$.

Return Loss

The return loss is defined as the maximum amount of optical power returning through input port when optical signals are launched into. It is measured over the passband $\lambda_c \pm 6.5\text{nm}$.



CWDM 4ch Mux (SC/SPC)



- (1) Protective Case
- (2) Optical Fiber (900 μ m loose tube)
- (3) Mark Band
- (4) Connector(SC/SPC)
- (5) Label

1*** is selected central wavelength in nm.

Unit: mm