YAS0576009

Standard Specification of AWG

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1. Introduction

This document covers the standard specification of AWG.

2. Product Code

AWGNMXY-S0576009

NM : Channels, NM=16 : 16 channels, NM=32 : 32 channels, NM=40 : 40 channels
X : Filtering Shape, X=F : Flat top, X=G :Gaussian
Y : Channel Plan, Y=1 : Plan1, Y=2 : Plan2, Y=3 : Plan3, Y=4 : Plan4

3. General Specification

General Specification is shown in Table 1 to 3.

Table1. AWG Characteristics

No.	Item	Specification	Note
1	Number of Channel	16, 32 or 40	
2	Insertion Loss	Flat top : =< 6dB	*) Note1
		Gaussian: =< 4dB	*) Note1
3	Band width of Flat top type	1dB BW : >=0.4nm(50GHz)	
		3dB BW : >=0.6nm(75GHz)	
4	Ripple	=< 0.5dB	*) Note1
5	IL Uniformity	=< 1dB	*) Note1
6	Return Loss	>= 40dB	*) Note1
7	PDL	<0.5dB	*) Note1
8	Adjacent Isolation	>= 25dB	*) Note1
9	Non-adjacent Isolation	>= 35dB	*) Note1
10	Total Isolation	>= 22dB	*) Note1
11	CD	=<+/-15ps/nm	*) Note1
12	PMD	=< 0.5ps	*) Note1
13	Channel Plan (for 40 channels)	Plan1 : 1529.16 to 1560.20nm	C-band 50GHz Shift from ITU 100GHz Spacing 40ch
		Plan2 : 1529.55 to 1560.61nm	C-band ITU 100GHz Spacing 40ch
		Plan3 : 1570.42 to 1603.17nm	L-band ITU 100GHz Spacing 40ch
		Plan4 : 1570.83 to 1603.60nm	L-band 50GHz Shift from ITU 100GHz Spacing 40ch
14	Operation Ambient Temperature	-5 to 65degC	
15	Storage Ambient Temperature	-40 to 85degC	

*)Note1 : Characteristics are specified in the operating bandwidth as follows,
Flat top : λitu+/-0.1nm (+/-12.5GHz).
Gaussian : λitu+/-0.05nm (+/-6.25GHz).

Table2. AWG Electrical Characteristics

No.	Item	Specification
1	Chip Temperature Control Device	Heater
2	Temperature Sensor	Thermistor
3	Chip Set Up Temperature	+70 to +85degC
4	Pin out Design	Pin1 : Heater+
		Pin2 : NC
		Pin3 : NC
		Pin4 : Thermistor A
		Pin5 : NC
		Pin6 : NC
		Pin7 : Thermistor B
		Pin8 : NC
		Pin9 : NC
		Pin10 : Heater-
5	Heater Resistance	2.5 to 2.8 Ω

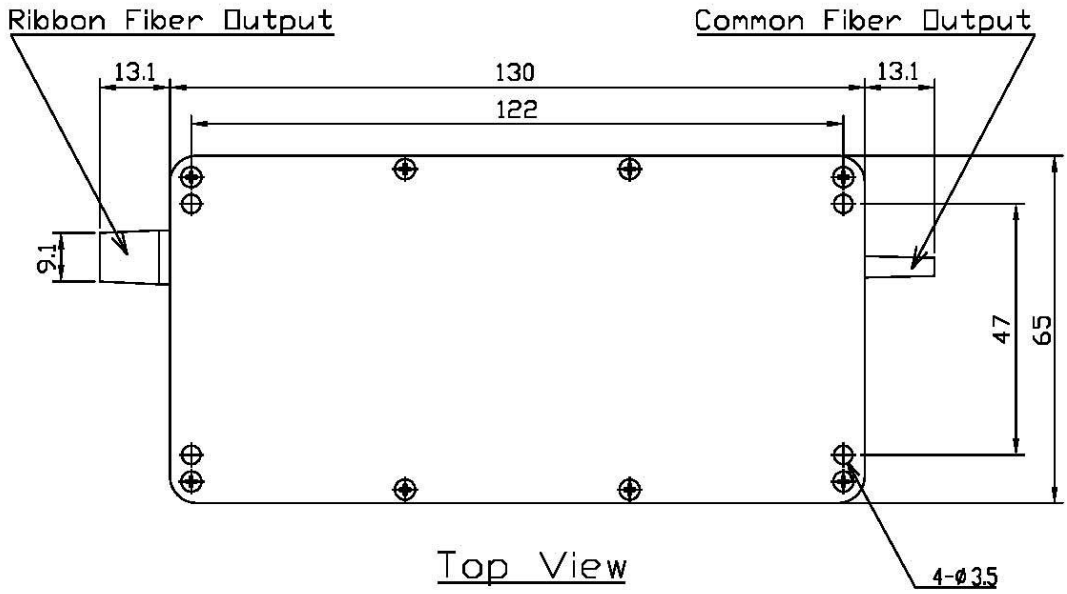
Table3 AWG Size

No.	Item	Specification
1	Package Dimensions	See Appendix 1
2	Input/Output Connector	LC/PC
3	Fiber Type	SMF

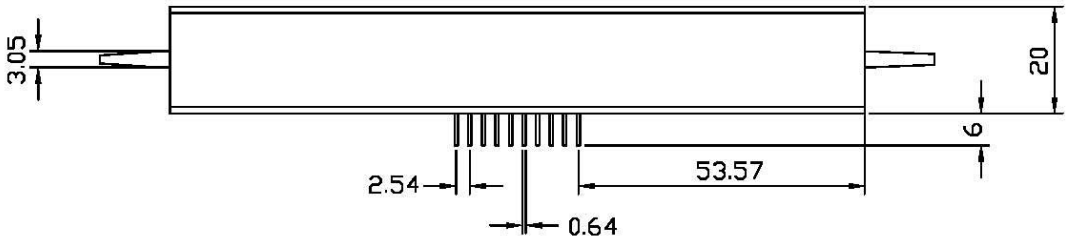
4. Revision History

Revision	Date	Description
First Issue	March 30, 2005	

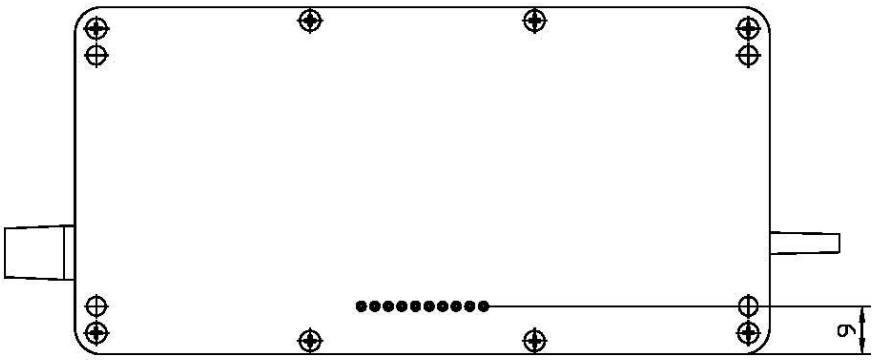
Appendix 1-1. Detailed dimensions of Package



Top View



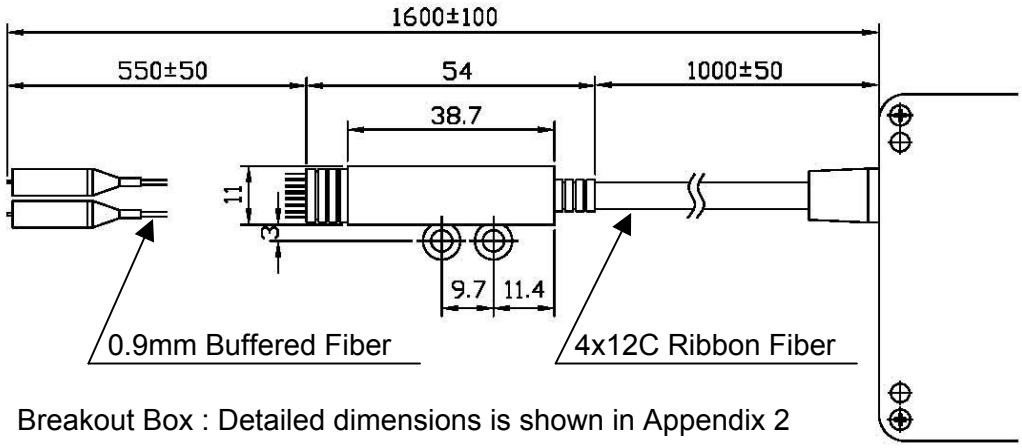
Side View



Bottom View

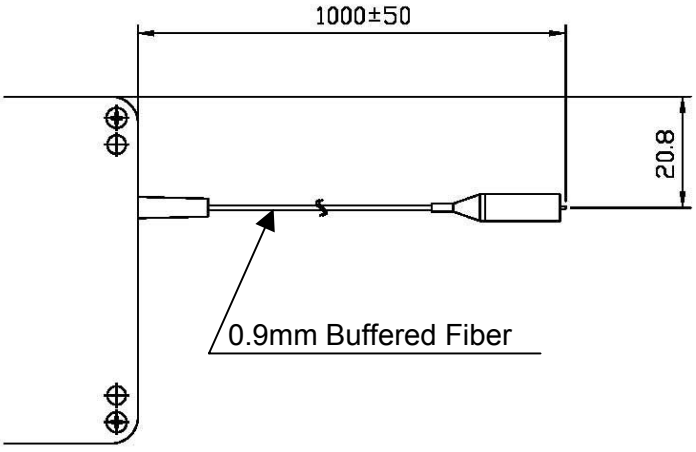
Appendix 1-2. Detailed dimensions of Package

Fiber Length : Channel Port



Breakout Box : Detailed dimensions is shown in Appendix 2

Fiber Length : Common Port



Appendix 2. Detailed dimensions of Breakout Box