

## FEATURES

- ◆ Excellent linearity
- ◆ Excellent distortion performance
- ◆ High reliability
- ◆ Low input noise
- ◆ AGC: 19dBmV/channel RF output
- ◆ InGaP pHEMT IC technology

## DESCRIPTION

The supply voltage of CMO860AGC is 12V(DC) and 5V(DC). The modules have an FC/APC or SC/APC Connector, with a monomode optical input Suitable for 1100 to 1650nm wavelengths, a terminal to monitor the photo diode current and an electrical output having a characteristic impedance of 75Ω. Optical power receiving at -7~+1dBm.

## HANDLING

Fibreglass optical coupling :  
maximum tensile strength= 5 N ; minimum bending radius=35mm

## LIMITING VALUES

In accordance With the Absolute Maximum Rating System

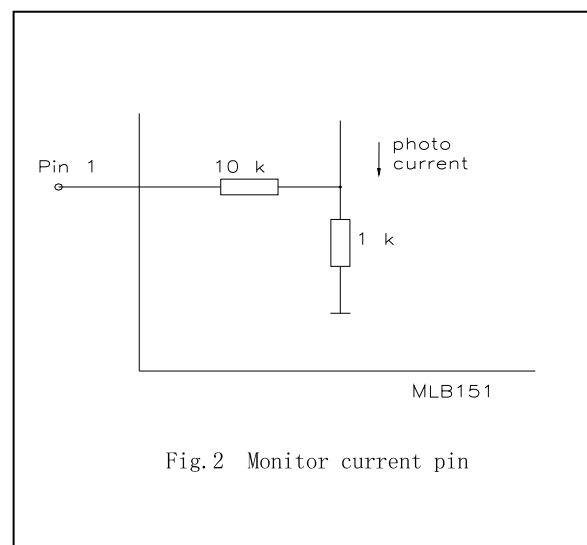
SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNITS
$P_{in}$	Optical input power		-	3	mw
$T_{stg}$	Storage temperature		-40	+90	°C
$T_{op}$	Operating temperature		-20	+90	°C
ESD	ESD sensitivity	Human body model; R=1.5KΩ;C=100pF	500	-	V

**CHARACTERISTICS**

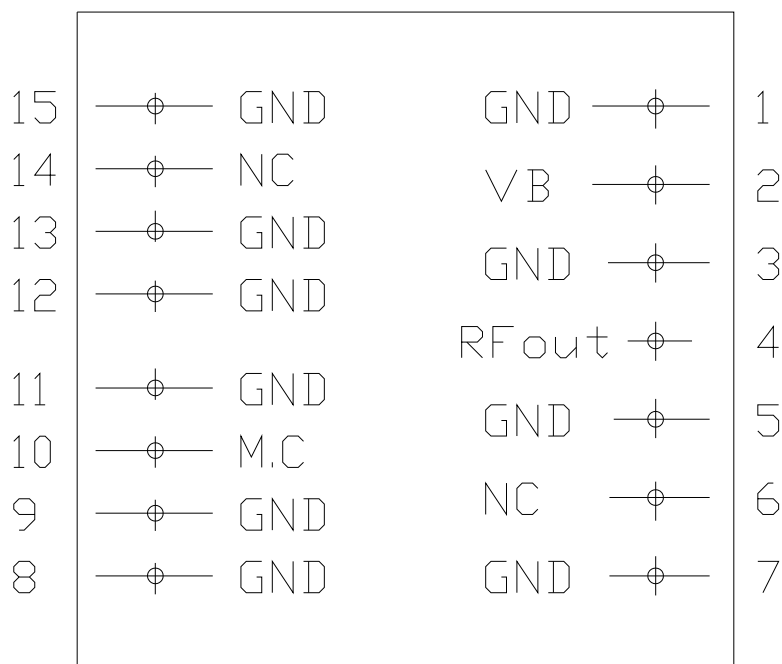
Tmb=25°C, VB=12V, Zs=ZL=75Ω

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
f	Frequency range	MHz	40		870	
S	responsively	V/W	850	-	-	λ=1310nm
Vo	Output voltage	dBμV	-	79	-	60~99 channels flat; Optical power receiving at -7~+1dBm
FL		dB	-	-	±0.65	f=40 to 860 MHz
CTB	Composite Triple Beat	dB	-	-70	-	60 channels flat ; measured at 543.25MHz;
CSO	Composite Second Order distortion	dB	-	-65	-	Optical power receiving at -7~+1dBm
CNR	Noise carrier rating	dB	-	52	-	Optical power receiving at 0 dBm
S22	Output Return loss	dB	-	-	-14	f=40 to 860 MHz
	Optical input return losses	dB	-	-	-45	
Sλ	Spectral sensitivity	A/W	0.85	-	-	λ=1310±20nm
		A/W	0.9	-	-	λ=1550±20nm
λ	Optical wavelength	nm	1100	-	1650	-
I <sub>tot</sub>	Total Current Consumption	mA	160	-	180	VB=12V & 5V (DC)

**PHOTODIODE CURRENT MONITOR PIN**



**Assembly PCB Pin DESCRIPTION (TOP VIEW)**



PIN	NAME	DESCRIPTION	PIN	NAME	DESCRIPTION
1	GND	Ground	8	GND	Ground
2	VB	+ 12V Supply for the module	9	GND	Ground
3	GND	Ground	10	M.C	Monitor Current
4	RFout	Output for the model	11	GND	Ground
5	GND	Ground	12	GND	Ground
6	NC	+ 5V Supply for the module	13	GND	Ground
7	GND	Ground	14	NC	NC
-	-	-	15	GND	Ground

**ATTENTION:**

PIN 2: SUPPLY +12V

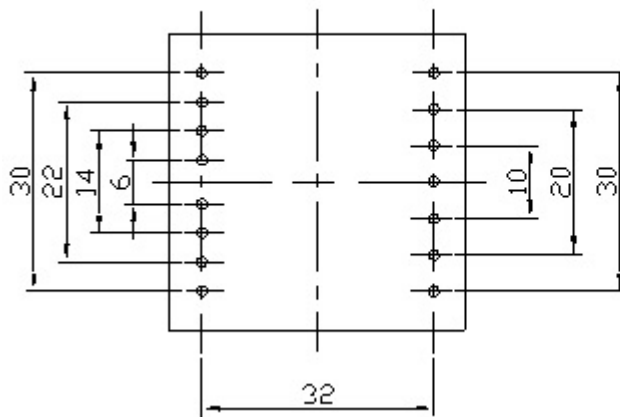
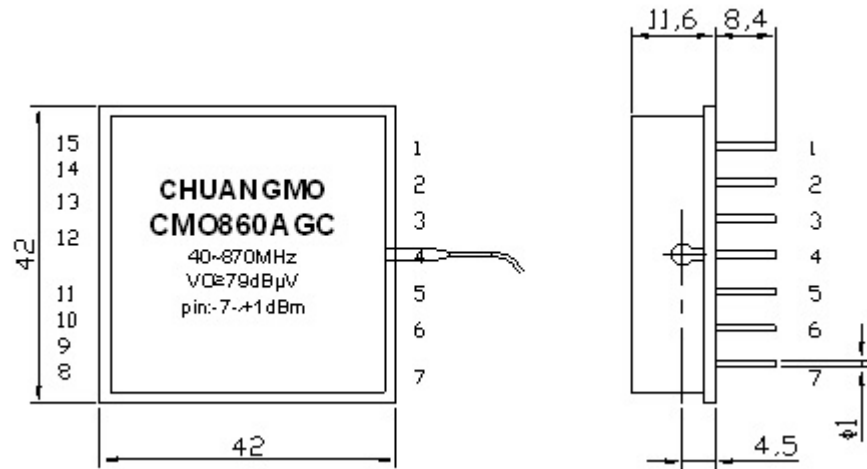
PIN 6: SUPPLY +5V

# CHUANGMO Optical Receiver Module

# CMO860AGC

## MODULE DIMENSIONS

UNIT:mm



BOTTOM VIEW