

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 8V(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

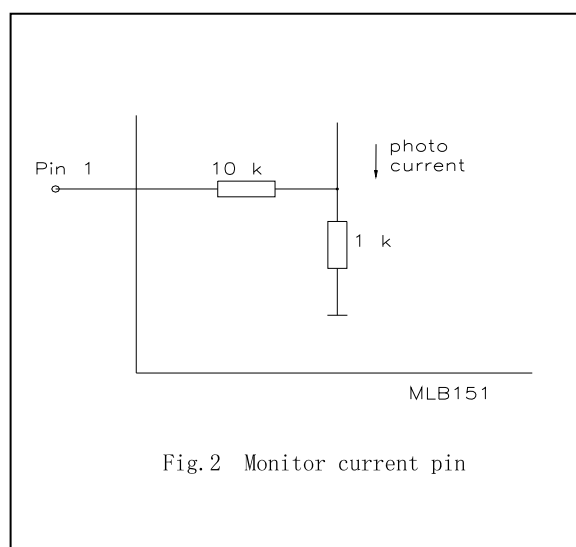
SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNITS
P_{in}	Optical input power		-	3	mw
T_{stg}	Storage temperature		-40	+90	°C
T_{op}	Operating temperature		-20	+90	°C
ESD	ESD sensitivity	Human body model; R=1.5KΩ;C=100pF	500	-	V

CHARACTERISTICS

Tmb=25°C, VB=8V, 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 _{tot}	Total Current Consumption	mA	160	-	180	VB=8V (DC)

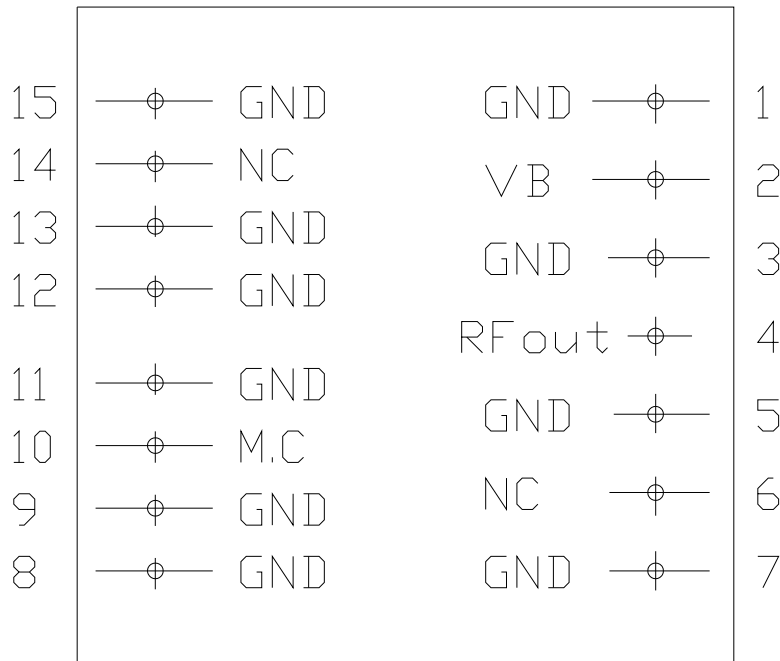
PHOTODIODE CURRENT MONITOR PIN



CHUANGMO Optical Receiver Module

CMO860AGC-8V

Assembly PCB Pin DESCRIPTION (TOP VIEW)



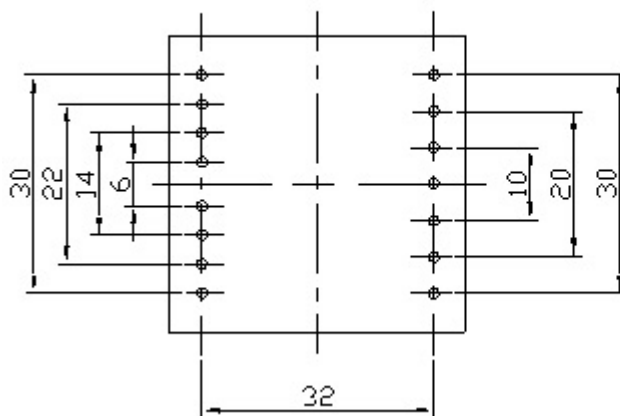
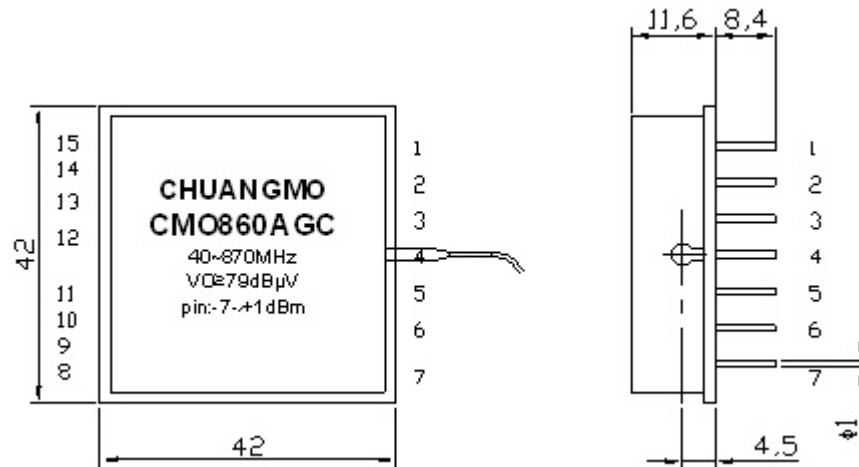
PIN	NAME	DESCRIPTION	PIN	NAME	DESCRIPTION
1	GND	Ground	8	GND	Ground
2	VB	+ 8V Supply for the module	9	GND	Ground
3	GND	Ground	10	M.C	Monitor Current
4	RFout	Output for the model	11	GND	Ground
5	GND	Ground	12	GND	Ground
6	NC	NC	13	GND	Ground
7	GND	Ground	14	NC	NC
-	-	-	15	GND	Ground

CHUANGMO Optical Receiver Module

CMO860AGC-8V

MODULE DIMENSIONS

UNIT:mm



BOTTOM VIEW