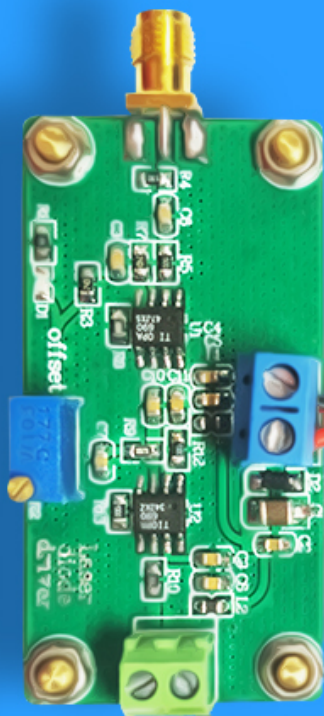


品质



THE MOST EASILY BROKEN THING IN THE WORLD IS THE MAN'S WINE
GLASSOLITICIAN'S PROMISE, GIRLS' DREAMSTEELWIRE-LIKELOVETHE
VIRTUOUSOF MODERNSOCIETY AND THE HOLY HEA

× 可选规格

- ①默认配置 1KHz~150MHz
- ②兼容DC版本 DC~1MHz

光纤激光发射模块

THE MOST EASILY BROKEN THING IN THE WORLD IS THE MAN'S WINE GLASSOLITICIAN'S PROMISE, GIRLS' DREAMSTEELWIRE-LIKELOVETHE
VIRTUOUSOF MODERNSOCIETY AND THE HOLY HEA

- ▶ 宝贝名称：光纤激光发射模块
- ▶ 宝贝供电：12V （注：兼容DC版本供电为5V）
- ▶ 尺 寸：(PCB) 57mm * 29mm （定位孔）50mm * 22mm
- ▶ 输出电流：190mA(MAX)
- ▶ 信号输入幅度要求： $V_{PP} > 1V$
- ▶ 信号输入频率：1KHz~150MHz（默认配置），1Hz~1KHz
(需客户自行配置，将C3、C6、C10、C11电容加大，越大频率越低)

K · W

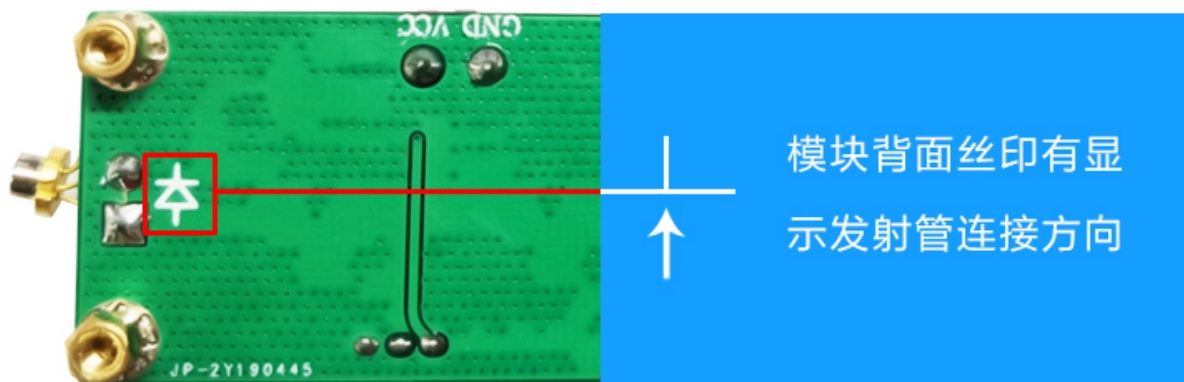
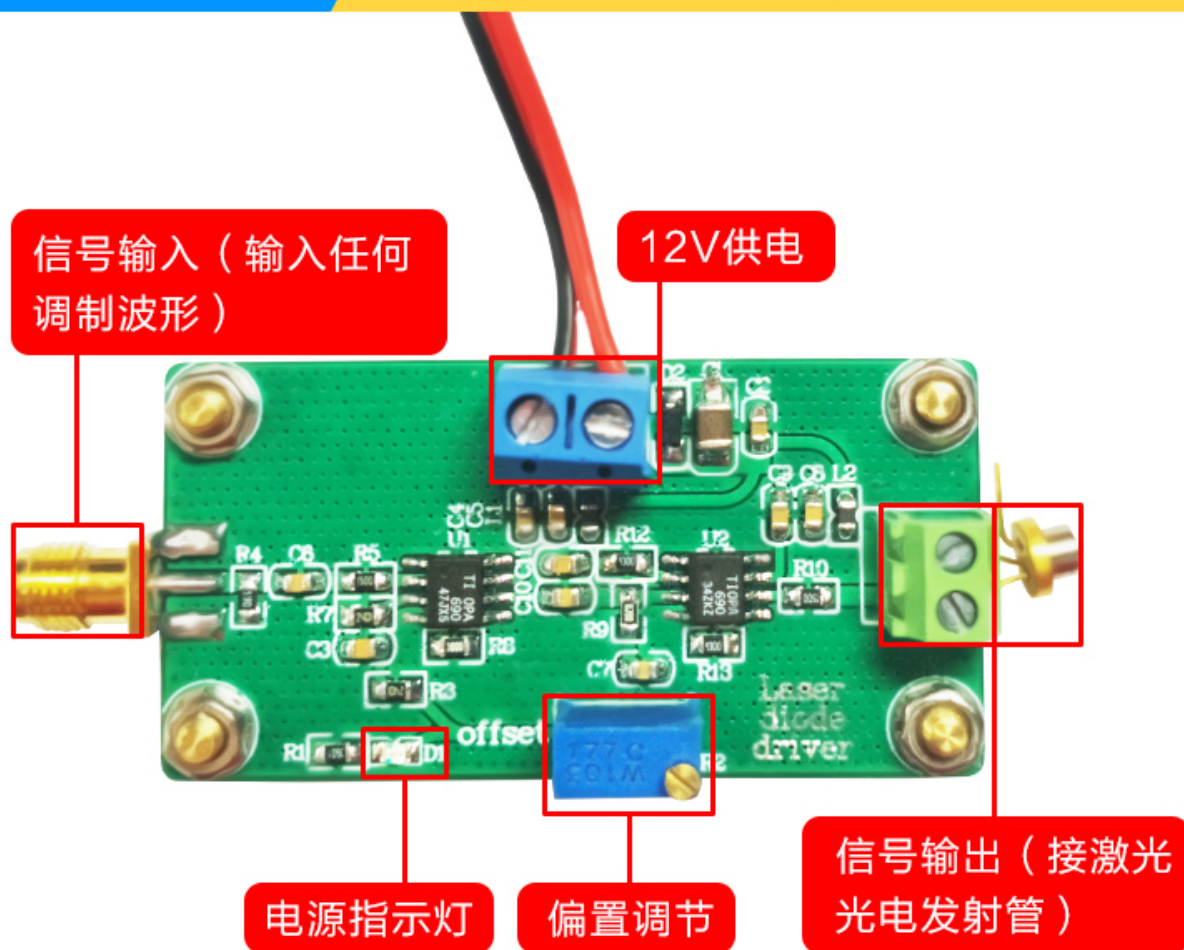
模拟电信号变送光信号

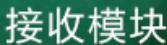
转 换

本模块可以将任何输入的调制波形信号变送为光信号，经过激光发射管将光信号发射出去（低频可直接用LED灯发射），或者通过光纤传输光信号，再配合本店另一款雪崩二极管光信号接收模块可以将接收到的光信号变送为电信号，从而实现信号的电光-光电转换及光通信。

功能示意

THE MOST BASIC CIRCUIT IN THE
WORLD IS THE BASIC CIRCUIT. IT'S THE MOST BASIC CIRCUIT.
THE BASIC CIRCUIT IS THE MOST BASIC CIRCUIT. IT'S THE MOST BASIC CIRCUIT.





雪崩光电二极管

激光光电发射管

发射模块

如连接测试图所示，两个模块均为12V供电，发射模块输出端用激光光电发射管将光信号发射到接收模块输入端连接的雪崩光电二极管上，由于所选用的激光发射管功率较小，光信号不是很集中，所以测试距离要比较近才能得到较好的效果。当然也可以光纤进行传输，这样效果也比较理想。

本店所配雷射發射管相關參數:

FEATURES

- > VCSEL
- > Low Threshold and Low Operating Current
- > High Bandwidth
- > High Reliability

APPLICATIONS

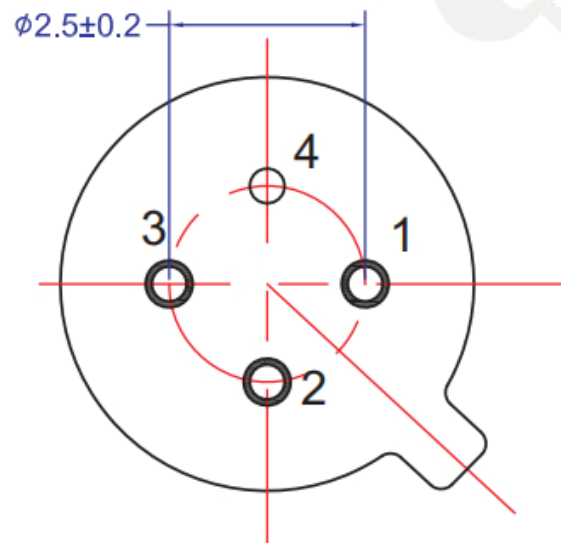
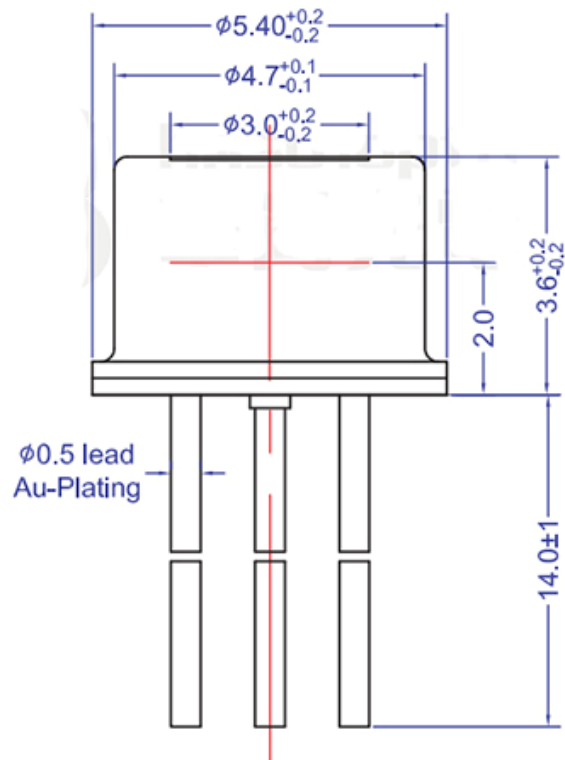
- > Optical Communication System
- > Fiber Optical Sensor
- > Instrumentation

Absolute Maximum Ratings

ITEMS	SYMBOL	RATINGS	UNIT
Storage Temperature	Tstg.	-40~+85	°C
Operating Temperature	Topr.	-10~+85	°C
Lead Solder Temperature	Ts(10s)	260	°C
Continuous Reverse Voltage	VR	10	V

Electrical & Optical Characteristics (Ta=25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Threshhold Current	Ith			1.75	3	mA
Slope Efficiency	η	IF=6mA	0.04	0.07	0.14	mW/mA
Wavelength	λp	IF=6mA	830	850	860	nm
Forward Voltage	VF	IF=6mA	1.6	1.8	2.1	V
Breakdown Voltage	VBD	IR=10uA	5	14		V
Rise Time (10-90%)	tr	@Ibias=6mA			0.15	ns
Fall Time (10-90%)	tf	@Ibias=6mA			0.15	ns
Series Resistance	Rs		35	45	65	Ohm
Spectral width(RMS)	Δλ	IF=6mA			0.85	nm
Relative Intensity Noise	RIN	IF=6mA,f=1GH		-130	-122	dB/Hz
PD Monitor Current	IM	IF=6mA		80		μA



PIN

1

2

3

4

DESCRIPTION

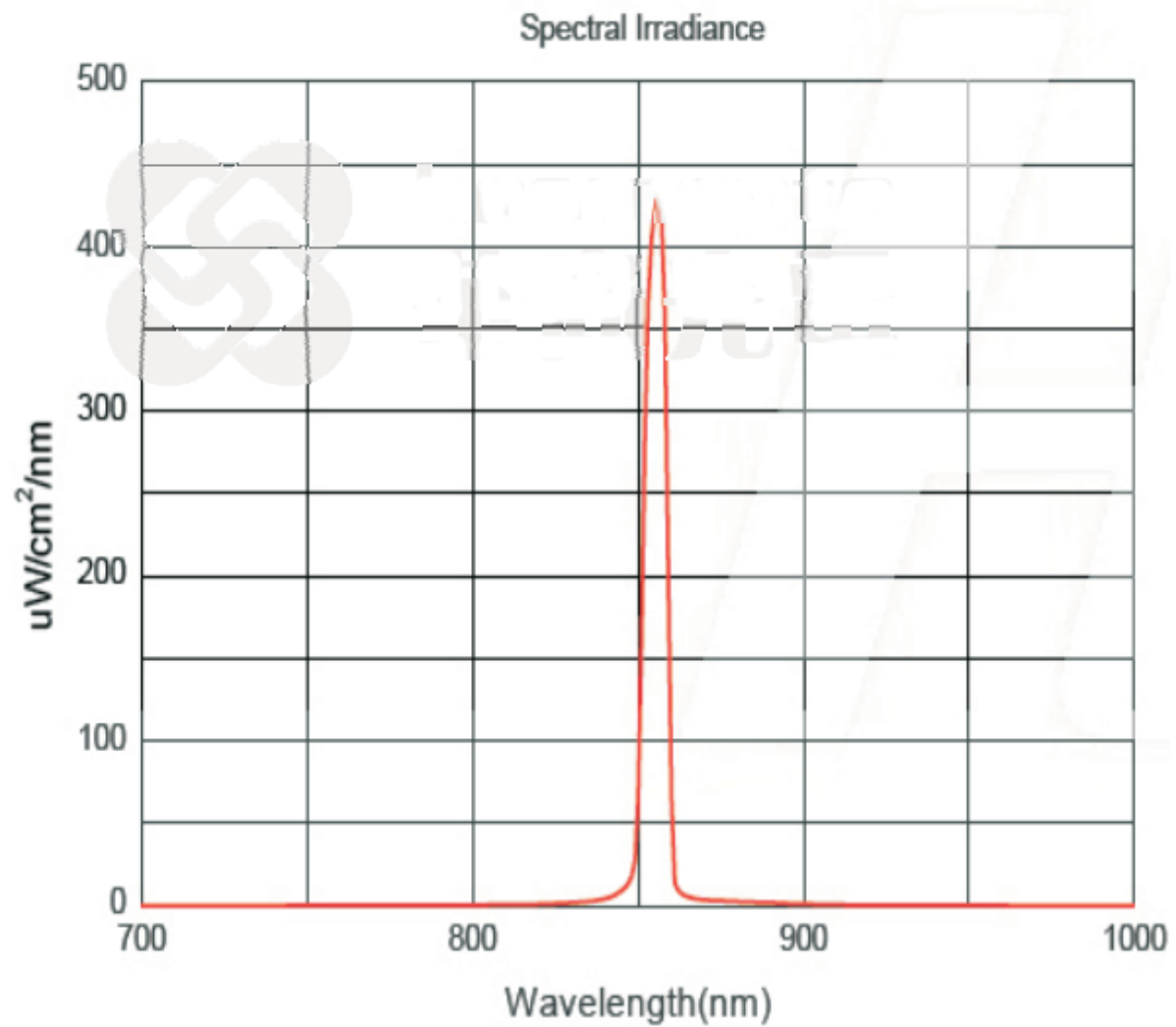
LD-

LD+/PD-

PD+

GND

TYPICAL PERFORMANCE CURVES

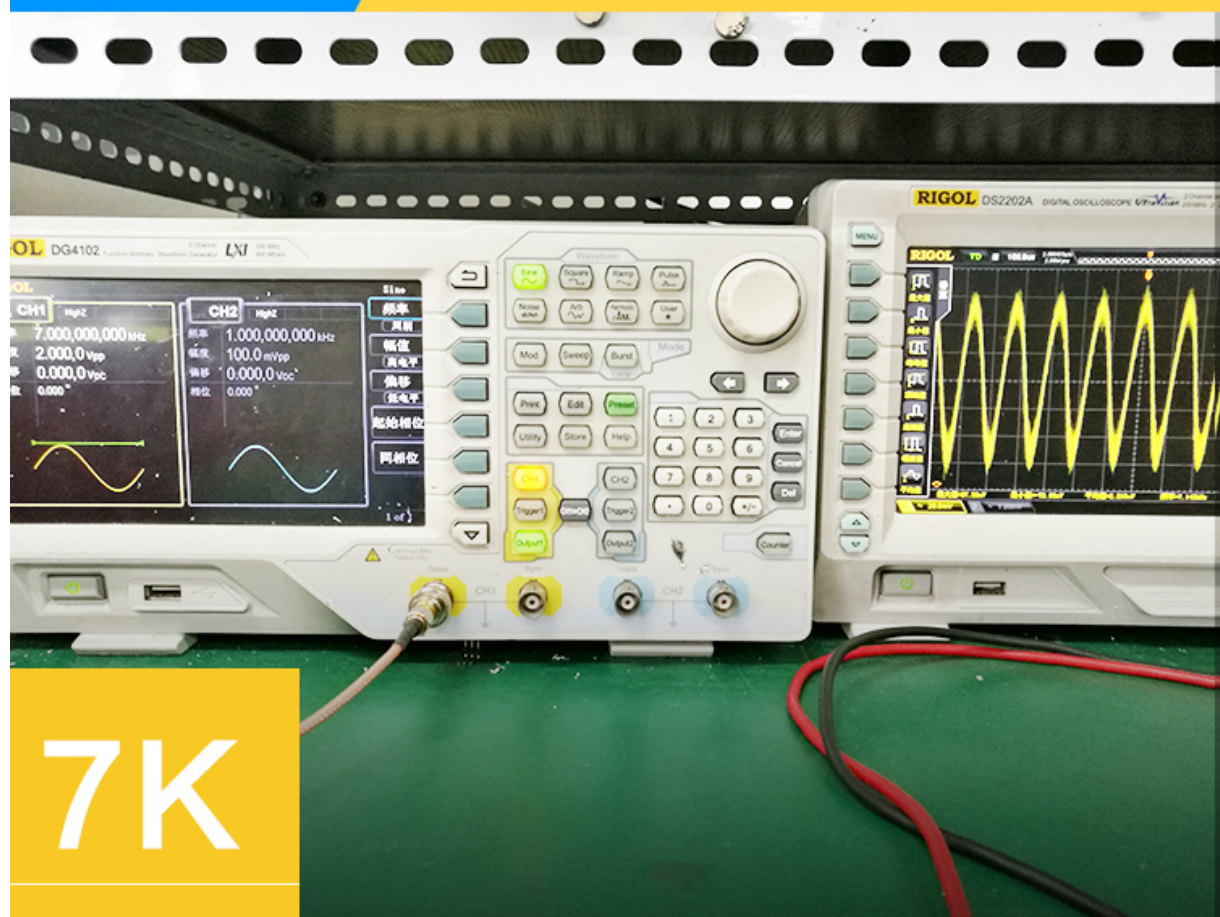


Divergence angle

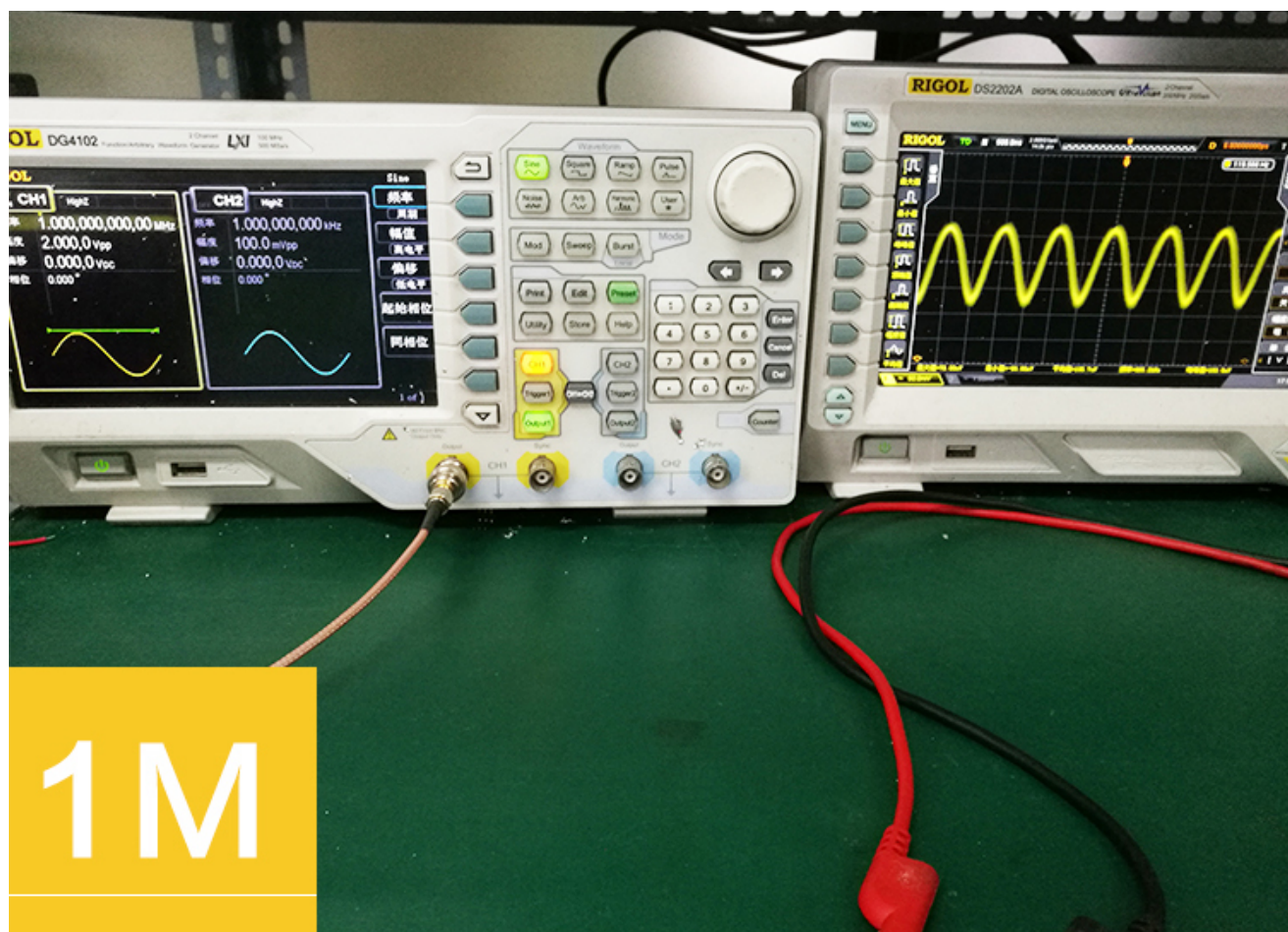


宝贝实测

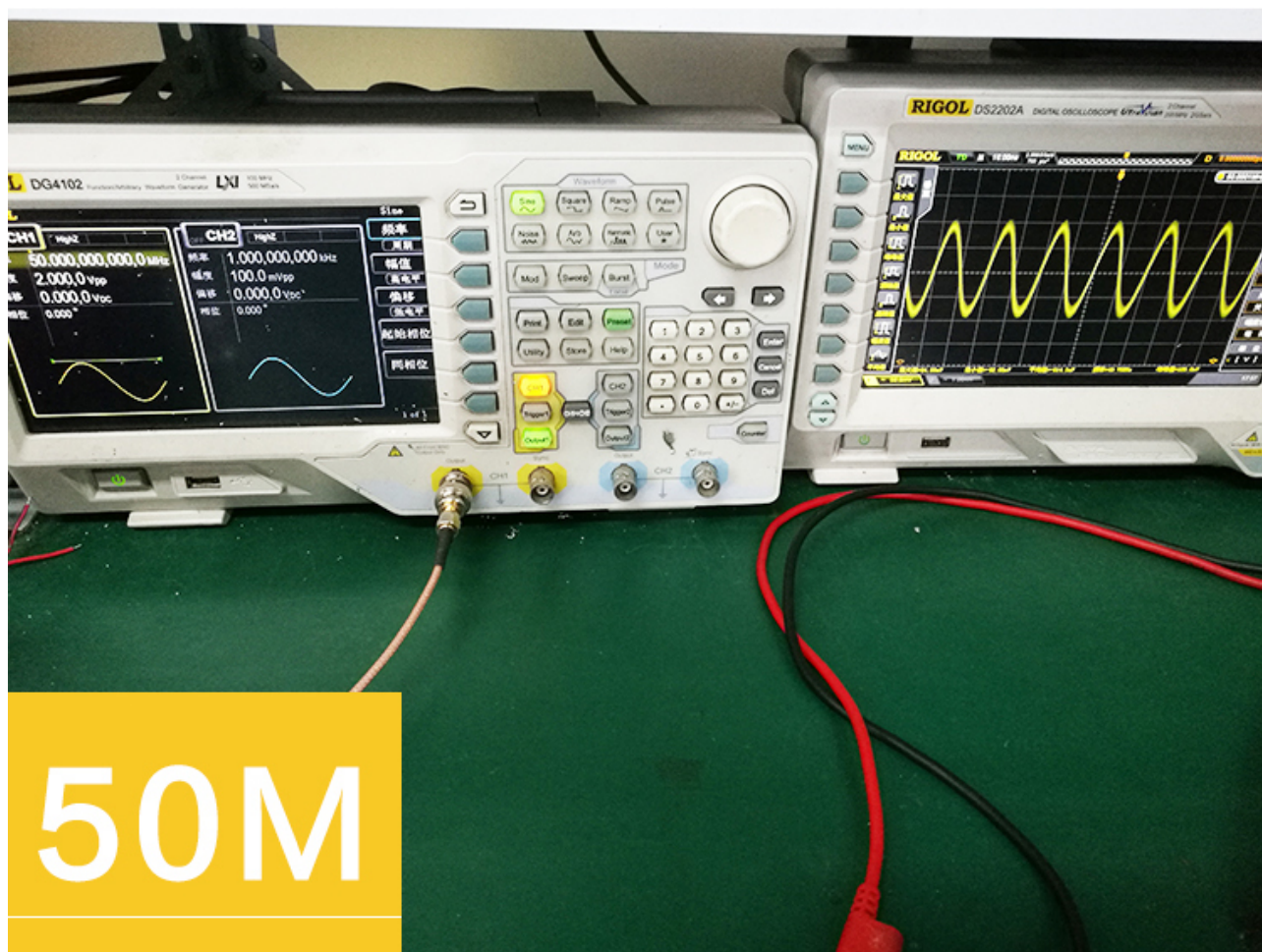
THE BEST BASED KNOWN THING IN THE
WORLD IS THE HUMAN GLASS/SLIDING'S PROGRESS, ONLY "CONNECTION",
WAS A LITTLE BIT VERTICAL OF RECOMMENDATION AND THE ONLY ONE.



左边由信号发生器给发射模块输入7KHz，2Vpp的正弦波信号
经过两个模块的电光-光电转换后得到右边示波器效果图，频率
为7.143KHz



左边由信号发生器给发射模块输入1MHz，2Vpp的正弦波信号经过两个模块的电光-光电转换后得到右边示波器效果图，频率为985.2KHz



左边由信号发生器给发射模块输入50MHz，2Vpp的正弦波信号经过两个模块的电光-光电转换后得到右边示波器效果图，频率为49.75MHz



左边由信号发生器给发射模块输入100MHz，2Vpp的正弦波信号
经过两个模块的电光-光电转换后得到右边示波器效果图，频率
为96.15MHz