APPROVAL SHEET

DATE: 11/29/2007

cosmo ELECTRONICS CORPORATION	Photolink : KPLT2500M40	NO.60F10004	REV.
		SHEET 1 OF 4	1

FIBER OPTIC TRANSMITTING MODULE
FOR DIGITAL AUDIO EQUIPMENT

Features

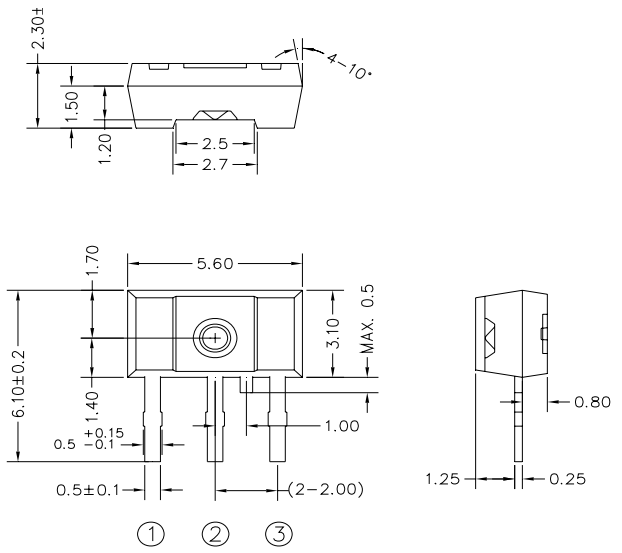
- TTL interface.
- LED is driven by differential circuit.
- A Self-tapping hole for easy attachment to audio Equipment panels.

Applications

- Audio equipment.
- DVD player.
- Automobile.

Outline Dimensions

(Unit:mm)



注1. 無指定尺寸公差部分: ±0.2㎜

Note1. General dimensions tolerance: ±0.2㎜

注2. 無指定角度公差部分: ±3°

Note2. General angle tolerance: ±3°

注3. 無指定Corner R: Max 0.4mm

Note3. General corner: Max 0.4mm

Pin Connection
1. Vin
2. Vcc
3. GND

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		SHEET 2 OF 4	1

1. Maximum Ratings（Ta=25℃）

Parameter	Symbol	Rating	Unit
Storage Temperature	T_{stg}	-40~+85	℃
Operating Temperature	T_{opr}	-30~+80	℃
Power Dissipation	P_{max}	120	mW
Supply Voltage	Vcc	-0.5~7	V
Input Voltage	V_{IN}	-0.5~Vcc+0.5	V
Soldering Temperature	T_{sol}	260 (Note 1)	℃

Note 1：Soldering time ≦ 10 seconds（At a distance of 1 mm from the package）.

2. Recommended Operating Conditions

Parameter	Symbol	Min	Typ.	Max	Unit
Supply Voltage	V_{CC}	2.70	5.0	5.5	V
High-Level Input Voltage	V_{IH}	2.0	-	VCC	V
Low-Level Input Voltage	V_{IL}	0	-	0.8	V

3. Electrical and Optical Characteristics（Ta=25℃，V_{CC}=5V）

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Data Rate		NRZ Signal (Note 2)	DC	-	25	Mb/s
Fiber Output Power (Note 3)	Pf		-21	-	-15	dBm
Peak Emission Wavelength	λp		630	-	690	nm
Current Consumption	Icc		-	5	8	mA
High Level Input Voltage	V_{IH}		2.0	-	-	V
Low Level Input Voltage	V_{IL}		-	-	0.8	V
Low->High Propagation delay time	t_{PLH}				100	ns
High -> Low Propagation delay time	t_{PHL}				100	ns
Pulse Width Distortion	△tw	12.5Mbps NRZ Signal	-12	-	12	ns
Jitter Time	△tj				10	ns

Note 2：LED is on when input signal is high, and off when it is low.
The duty factor must be maintained between 25 to 75%.

Note 3：Measure with a standard optical fiber, peak value.

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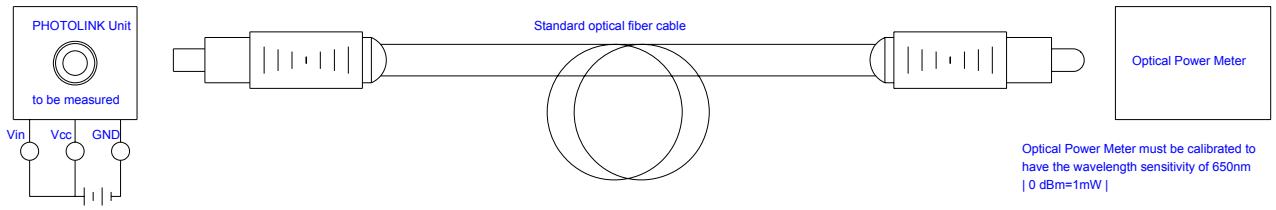
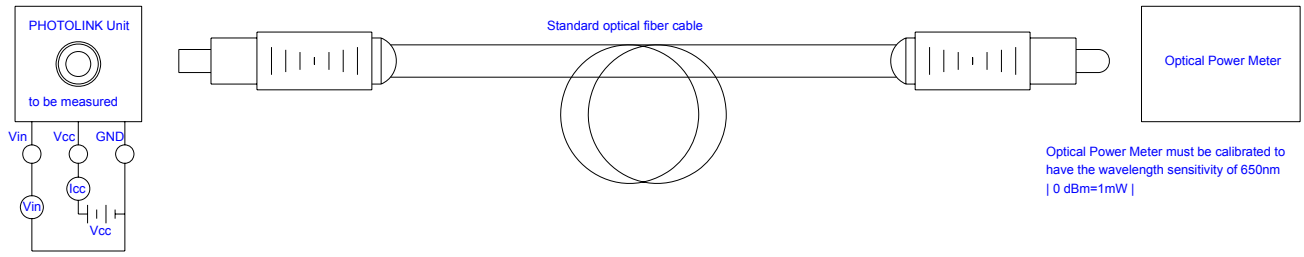
		SHEET 3 OF 4	1

4. Measuring method

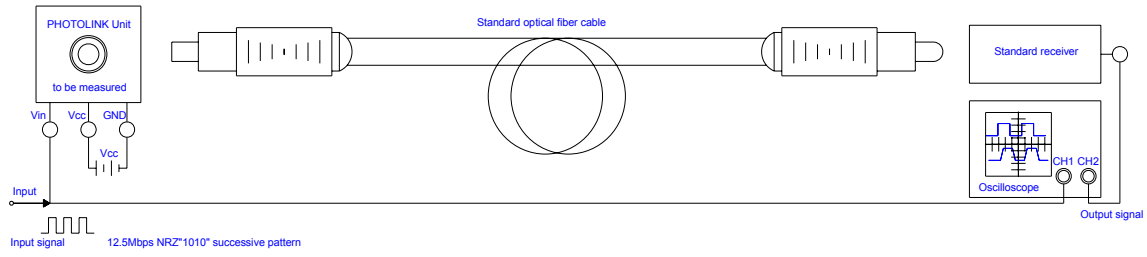
(1).Measuring method of optical output coupling fiber

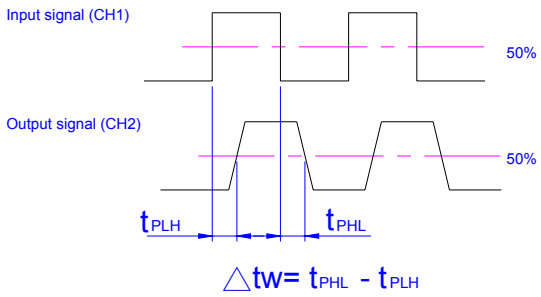


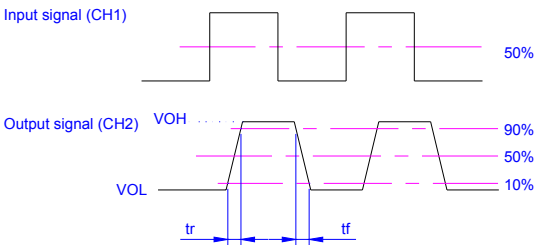
(2).Measuring method of power dissipation current and input voltage



(3).Measuring method of Pulse response







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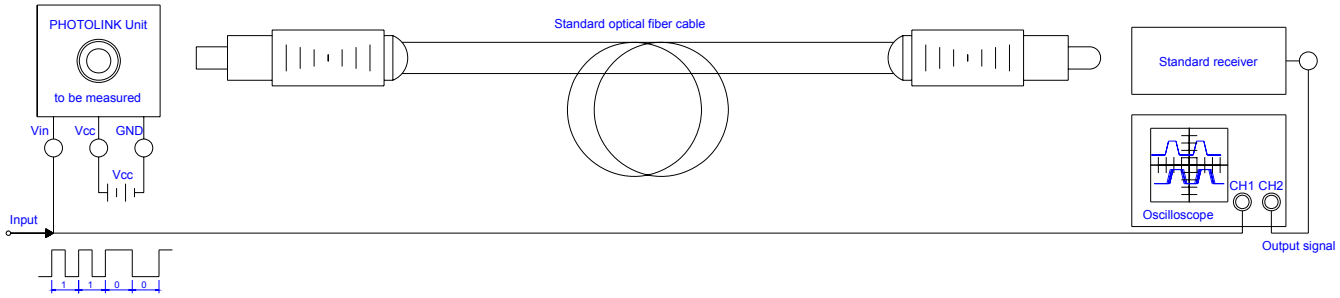
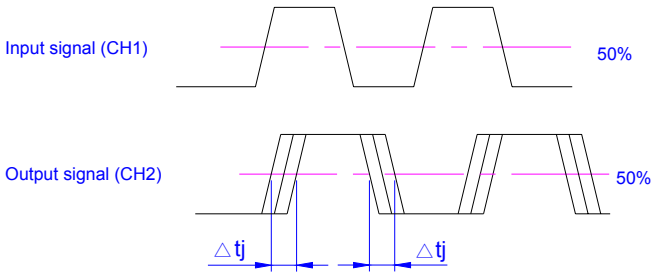
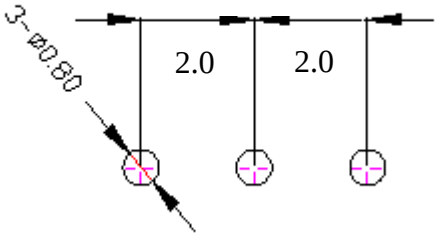
		SHEET 4 OF 4	1

(4).Measuring method of Jitter





5.Recommended PCB Layout



Notes:
1.Unit:mm
2.tolerance:±0.3mm