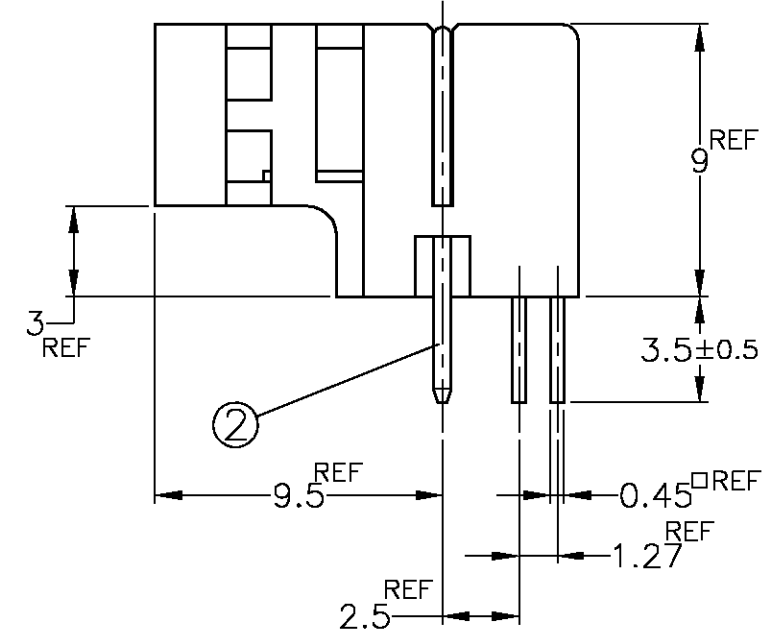
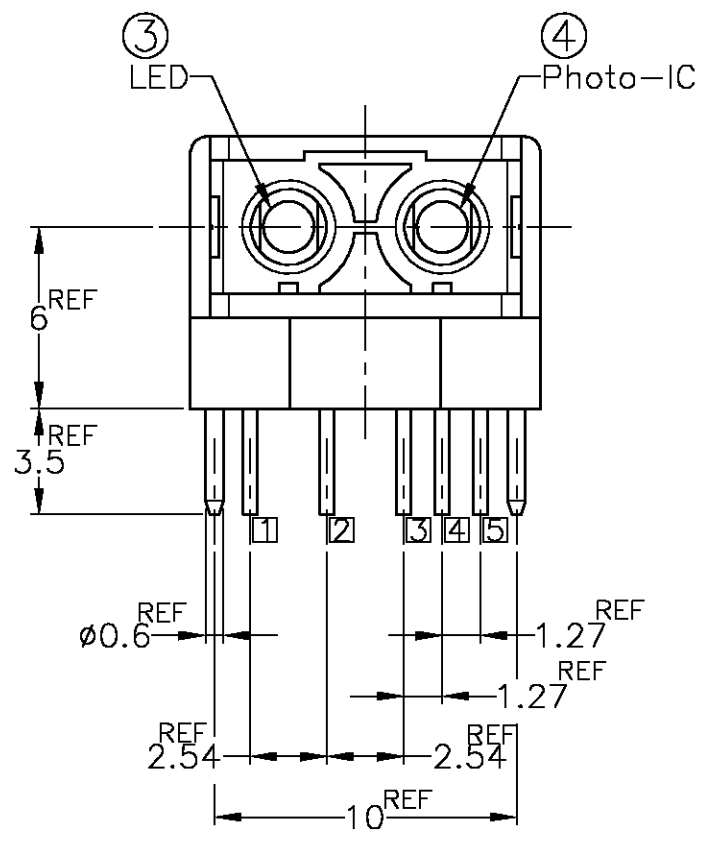
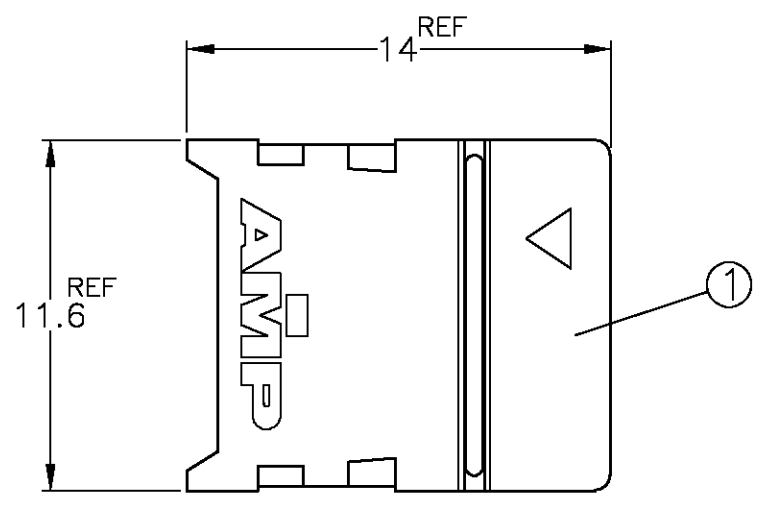


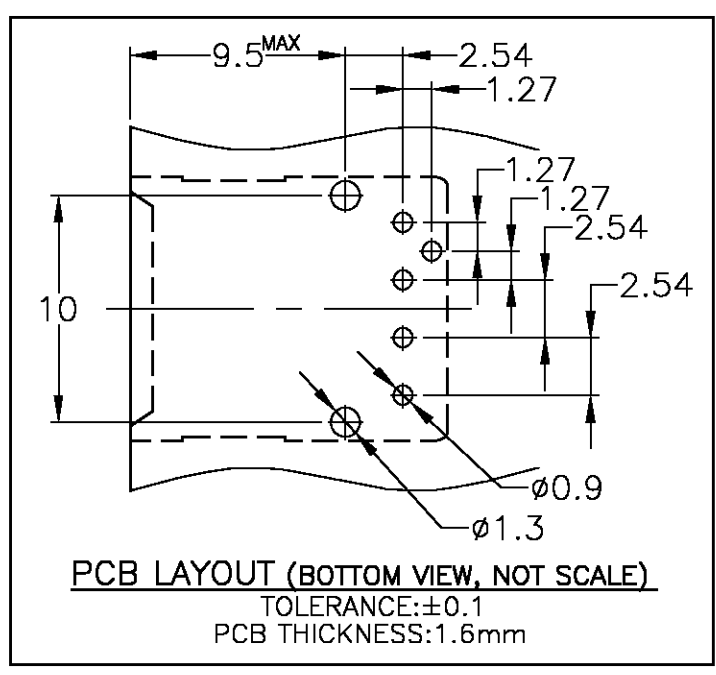
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LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
J	—		A	RELEASED	01APR05	T.K	T.H

①	ANODE
②	CATHODE
③	GND
④	Vout
⑤	Vcc
△	POLARIZATION



- MATERIAL  
 ADM MOLD: THERMOPLASTIC (熱可塑性樹脂)  
 SOLDERING POST: Pre-TIN BRASS (すずメッキ付黄銅)
- POLARIZATION: SEE ABOVE TABLE (極性)
- DEVICE PERFORMANCE: SEE SHEET 2 OF 2 (性能)
- THE CONDITION OF WASHING OFF FLUX (フラックス洗浄条件)  
 WASHING TIME: 30sec MAX. (洗浄時間)  
 SOLVENTS TEMPERATURE: 45°C MAX. (薬品温度)  
 USABLE SOLVENTS: (使用薬品)  
 ETHYL ALCOHOL (エチルアルコール)  
 METHYL ALCOHOL (メチルアルコール)  
 ISOPROPYL ALCOHOL (イソプロピルアルコール)
- OPERATING TEMP: -25~85°C (動作温度)
- STORAGE TEMP: -40~85°C (保存温度)



1	Photo-IC	④	5178670-1
1	LED	③	
1	SOLDERING POST	②	
1	ADM HSG	①	
QTY	PART NAME	ITEM	PART No.
COMPONENT PARTS			

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN T.KIKUTA 01APR05	Tyco Electronics AMP K.K. Kawasaki, Japan	
DIMENSIONS: 単位: 耗 mm		CHK T.HAYASHI 01APR05	NAME T.HAYASHI 01APR05	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		PRODUCT SPEC 製品規格	Duplex 20kbps Data-Link Module AMP OPTIMATE Mini-DNP CONN.	
0 PLC ± - 1 PLC ± - 2 PLC ± - 3 PLC ± - 4 PLC ± - ANGLES ± 1'		APPLICATION SPEC 取付適用規格	SIZE A3	CAGE CODE 00779
MATERIAL 材料 SEE TABLE		WEIGHT 1.33g	DRAWING NO 番号 C-5178670	RESTRICTED TO
CUSTOMER DRAWING			SCALE 尺度 4:1	SHEET 1 OF 2 REV A

LOC J	DIST —	REVISIONS 変更		
P	LTR	DESCRIPTION	DATE	DWN APVD
		SEE SHEET 1		

### DEVICE PERFORMANCE: LED

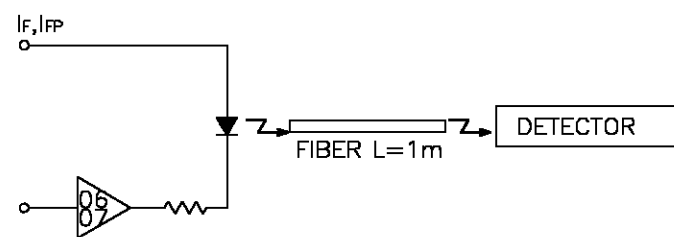
ABSOLUTE MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Storage ambient temperature	Tstg	-40~85	°C
Operating temperature	Topr	-25~85	°C
Power dissipation	P Max	90	mW
Forward current (DC)	IF	60	mA
Pluse forward current $\Delta$	IFP	500	mA
Reverse voltage	VR	5	V
Soldering condition	Tsol	260°C, 3sec	

OPT-ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Minimum fiber coupled power	Pf	$\Delta$ IF=30mA	-20.0	-19.4	--	dBm
		$\Delta$ IF=30mA	-17.0	--	--	dBm
		$\Delta$ IF=30mA	-14.5	--	--	dBm
Maximum fiber coupled power	Pf	$\Delta$ IFP=30mA	--	--	-9.5	dBm
		$\Delta$ IFP=30mA	--	--	-6.0	dBm
		$\Delta$ IFP=30mA	--	-5.0	-4.0	dBm
Peak emission wavelength	$\lambda p$		--	660	--	nm
Spectral half width	$\Delta \lambda$		--	20	--	nm
Reverse current (DC)	IR	VR=5V	--	--	10	$\mu$ A
Forward voltage (DC)	VF	IF=30mA	--	2.0	2.5	V
Rise time	tr	IFP=30mA	--	--	300	ns
Fall time	tf	IFP=30mA	--	--	300	ns
Capacitance between terminal	Ct	VR=0V, f=1MHz	--	30	--	pF

TEST CIRCUIT (FIBER COUPLED POWER)



### DEVICE PERFORMANCE: Photo-IC (Normally High)

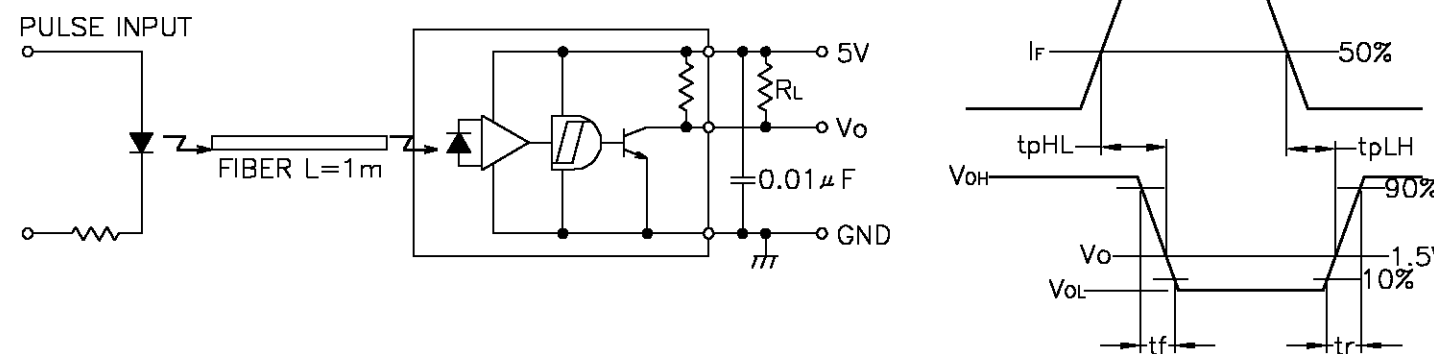
ABSOLUTE MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Storage ambient temperature	Tstg	-40~100	°C
Operating temperature	Top	-25~85	°C
Supply voltage	Vcc	7	V
Power dissipation		80	mW
Low level output current	IoL	16	mA
Soldering condition	Tsol	260°C, 3sec	

OPT-ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Maximum receiving power	Pmax	$\Delta$ $\Delta$	-6.0	-5.0	--	dBm
		$\Delta$ $\Delta$	-6.0	-5.0	--	dBm
		$\Delta$ $\Delta$	-6.0	-5.0	--	dBm
Minimum receiving power	Pmin	$\Delta$ $\Delta$	--	-27.4	-26.5	dBm
		$\Delta$ $\Delta$	--	-27.4	-26.5	dBm
		$\Delta$ $\Delta$	--	-27.4	-26.5	dBm
High level supply current	Icch	Vcc=5V, Pf=0	--	1.3	3.0	mA
Low level supply current	Iccl	Vcc=5V, Pf=Pmax	--	1.5	3.0	mA
High level output voltage	VoH	Vcc=5V, Pf=0	4.8	--	--	V
Low level output voltage	VoL	Vcc=5V, IoL=4mA, Rf=Pmax	--	--	0.4	V
Rise time	tr	Pf=Pmin., RL=2.2k $\Omega$	--	--	1.0	$\mu$ s
Fall time	tf	Pf=Pmin., RL=2.2k $\Omega$	--	--	1.0	$\mu$ s
Supply voltage	Vcc		2.2	--	7.0	V

TEST CIRCUIT (SWITCHING TIME)



- $\Delta$  POF (485/500 $\mu$ m) LENGTH=1m
- $\Delta$  POF (735/750 $\mu$ m) LENGTH=1m
- $\Delta$  POF (980/1000 $\mu$ m) LENGTH=1m
- $\Delta$  tw=50 $\mu$ s, Duty=50%, CL=10pF, RL=2.2k $\Omega$   
tpLH=15 $\mu$ s, tpLH=15 $\mu$ s,  $\Delta$ tw= $\pm$ 15 $\mu$ s
- $\Delta$  tw=100 $\mu$ s, Duty=1%
- $\Delta$  tw=50 $\mu$ s, Duty=10%

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN T.KIKUTA 01APR05	Tyco Electronics AMP K.K. Kawasaki, Japan	
DIMENSIONS: 単位: 耗 mm		CHK T.HAYASHI 01APR05	NAME 名称	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差		APVD T.HAYASHI 01APR05	Duplex 20kbps Data-Link Module AMP OPTIMATE Mini-DNP CONN.	
0 PLC $\pm$ - 1 PLC $\pm$ - 2 PLC $\pm$ - 3 PLC $\pm$ - 4 PLC $\pm$ - ANGLES $\pm$ 1'		PRODUCT SPEC 製品規格	SIZE A3	CAGE CODE 00779
MATERIAL 材料 SEE SHEET 1 OF 2		APPLICATION SPEC 取付適用規格	DRAWING NO 番号 C-5178670	RESTRICTED TO
		WEIGHT 1.33g	SCALE 尺度 4:1	
		CUSTOMER DRAWING		SHEET 2 OF 2
				REV A