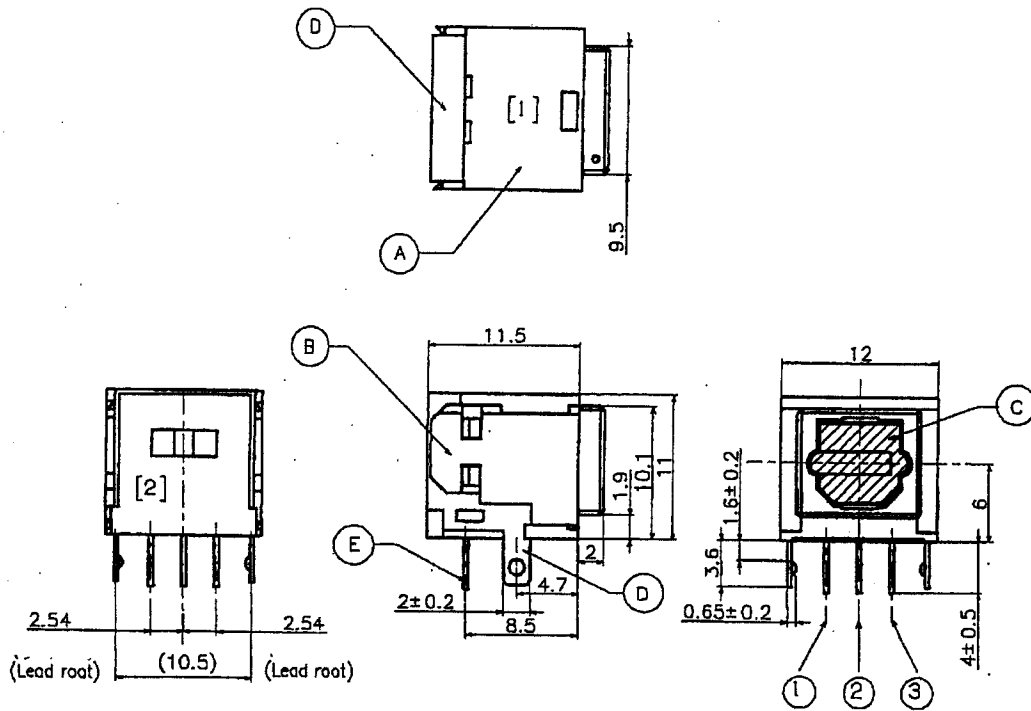
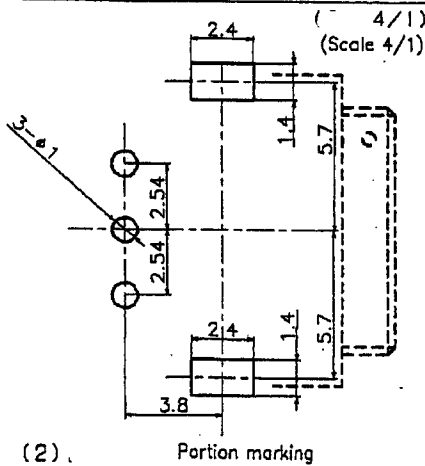


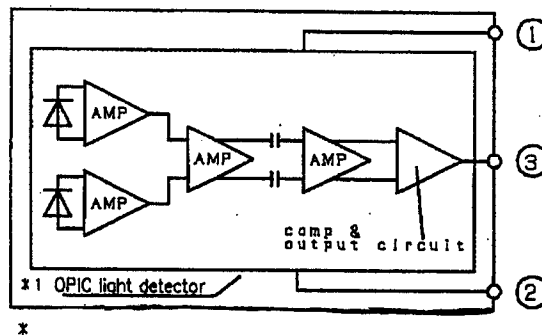
SHARP



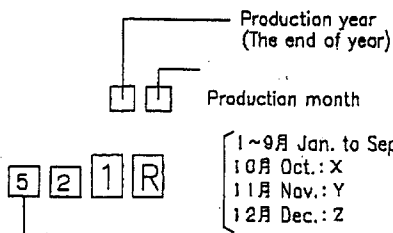
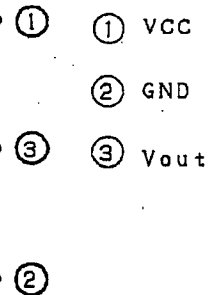
Example of mounting drawing from solder side
Unspecified tolerance ± 0.1



Internal equivalent circuit



Pin arrangement



A part of Model No.

SCALE

2/1

UNIT

1 = 1/1 mm

NAME

GP1FM521RZ

Outline Dimensions

DRAWING No. QY 10976102

3. Ratings and Characteristics

3.1 Absolute maximum ratings

Parameter	Symbol	Rating	Unit	Remark
Supply voltage	Vcc	-0.5 ~ 7.0	V	
Operating temperature	Topr	-20 ~ 70	°C	
Storage temperature	Tstg	-30 ~ 80	°C	
Soldering temperature	Tsol	260	°C	5s/time up to 2 times Only applied to solder dipping
Output current	IoH	2	mA	Source current
	IoL	10	mA	Sink current

3.2 Recommended operating conditions

Parameter	Symbol	MIN	TYP	MAX	Unit	Remark
Supply voltage	Vcc	4.75	5.0	5.25	V	
Operating transfer rate	T	0.1	—	13.2	Mb/s	Notes (1), (2)
Receiver input optical power level	Pc	-24.0	—	-14.5	dBm	Peak optical output

(Vcc=5.0V, Ta=25°C)							
No.	Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
1	Peak sensitivity wavelength	λp		—	700	—	nm
2	Supply current	Icc	Measuring method Refer to 3.4.1	—	15	25	mA
3	High level output voltage	VoH	Measuring method Refer to 3.4.2	2.7	3.5	—	V
4	Low level output voltage	VoL		—	0.2	0.4	V
5	Rise time	tr		—	17	23	ns
6	Fall time	tf		—	7	15	ns
7	L→H delay time	tpLH		—	—	180	ns
8	H→L delay time	tpHL		—	—	180	ns
9	Pulse width distortion	Δtw		-20	—	20	ns
10	Jitter	Δtj	3.4.3 Pc=-14.5dBm Measuring method Refer to 3.4.3 , Pc=-14.5dBm	—	1	15	ns
			3.4.3 Pc=-24dBm Measuring method Refer to 3.4.3 , Pc=-24dBm	—	—	15	ns

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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