SHARP

Under development

New product

GP1UM27XK series

IR Detecting Unit for Remote Control

Compact IR Detecting Unit for Remote Control

Features

(1) Compact

• Outline dimensions: $5.6 \times 9.6 \times 6.8$ mm

(GP1UM26XK)

 Mounting area: 44% reduction compared to conventional models

(2) Low dissipation current

Dissipation current: MAX.1.5mA

- (3) Product lineup includes types with strengthened resistance to electromagnetic induction noise.
- (4) Profile variations enable flexible mounting.

Applications

- AV equipment
- (2) Home appliances

Absolute Maximum Ratings

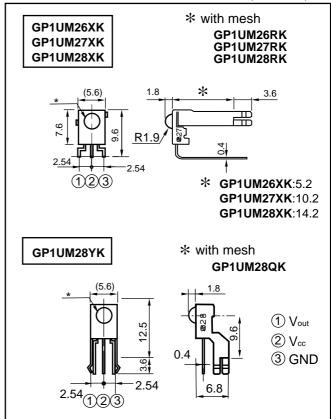
(Ta=25°C)

Parameter	Symbol	Ratings	Unit
Supply voltage	Vcc	6	V
*1 Operating temperature	Topr	- 10 to + 70	°C
Storage temperature	Tstg	- 20 to + 70	°C
*2 Soldering temperature	Tsol	260	°C

- *1 No dew formation
- *2 For 5s

Outline Dimensions

(Unit: mm)



Recommended Operating Conditions

(Ta=25°C

	(1a=25 C)		
Parameter	Symbol	Ratings	Unit
Supply voltage	Vcc	4.5 to 5.5	V

(Notice)

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SHARP

GP1UM27XK Series IR Detecting Unit for Remote Control

■ Electrical Characteristics

(Ta=25°C, Vcc=+5V)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Dissipation current	Icc	No incident light, Vcc=3V	-	-	1.5	mA
High level output voltage	Voh	-	V cc - 0.5	-	-	V
Low level output voltage	Vol	IoL=1.6mA	-	-	0.5	V
B.P.F. center frequency	fo	-	-	*3	-	kHz
Detecting distance	L	-	8	-	-	m

^{*3} B.P.F. center frequency for each model is shown in the list below.

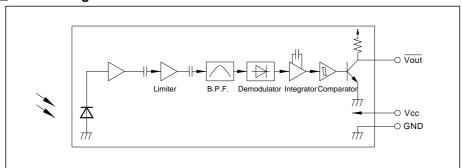
Model Line-ups

Various B.P.F. frequencies matching with customers' requirements are also available.

B.P.F. frequencies	Model No.					
40kHz		GP1UM26XK	GP1UM27XK	GP1UM28XK	GP1UM28YK	
	*	GP1UM26RK	GP1UM27RK	GP1UM28RK	GP1UM28QK	
36kHz		GP1UM260XK	GP1UM270XK	GP1UM280XK	GP1UM280YK	
	*	GP1UM260RK	GP1UM270RK	GP1UM280RK	GP1UM280QK	
38kHz		GP1UM261XK	GP1UM271XK	GP1UM281XK	GP1UM281YK	
	*	GP1UM261RK	GP1UM271RK	GP1UM281RK	GP1UM281QK	
36.7kHz		GP1UM262XK	GP1UM272XK	GP1UM282XK	GP1UM282YK	
	*	GP1UM262RK	GP1UM272RK	GP1UM282RK	GP1UM282QK	
32.75kHz		GP1UM263XK	GP1UM273XK	GP1UM283XK	GP1UM283YK	
	*	GP1UM263RK	GP1UM273RK	GP1UM283RK	GP1UM283QK	
56.8kHz		GP1UM267XK	GP1UM277XK	GP1UM287XK	GP1UM287YK	
		GP1UM267RK	GP1UM277RK	GP1UM287RK	GP1UM287QK	

^{*} Types with strengthened resistance to electromagnetic induction noise.

Block Diagram



As of September 2001

E1-000901-B

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 - --- Office automation equipment
 - --- Telecommunication equipment [terminal]
 - --- Test and measurement equipment
 - --- Industrial control
 - --- Audio visual equipment
 - --- Consumer electronics
 - (ii) Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:
 - --- Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
 - --- Traffic signals
 - --- Gas leakage sensor breakers
 - --- Alarm equipment
 - --- Various safety devices, etc.
 - (iii)SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:
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 - --- Telecommunication equipment [trunk lines]
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