

阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

Infrared Remote Control Receiver Module

IRM-8752K-2

Features

- High protection ability against EMI.
- Circular lens to improve the receive characteristic.
- Line-up for various center carrier frequencies.
- Low voltage and low power consumption.
- High immunity against ambient light.
- Photodiode with integrated circuit.
- TTL and CMOS compatibility.
- Long reception distance.
- High sensitivity.
- Pb free



Description

The IRM-8752K-2 device are miniature type infrared remote control system receiver which has been developed and designed by utilizing the most updated IC technology.

The PIN diode and preamplifier are assembled on lead frame, the epoxy package is designed as an IR filter.

The demodulated output signal can directly be decoded by a microprocessor.

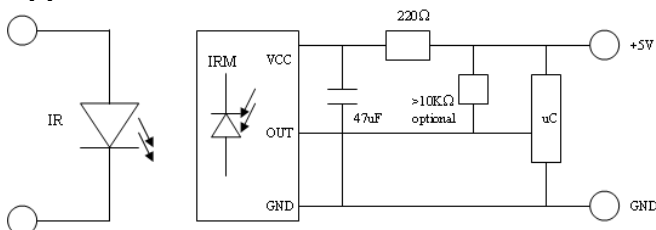
Pin Configuration

1. OUT
2. GND
3. V_S

Applications

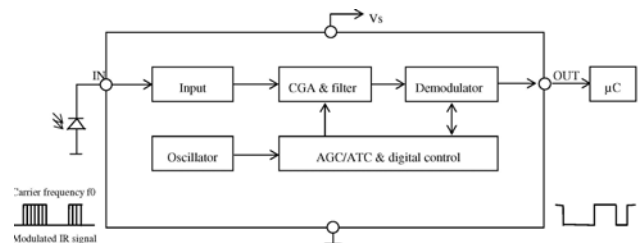
- Light detecting portion of remote control
- AV instruments such as Audio, TV, VCR, CD, MD, etc.
- Home appliances such as Air-conditioner, Fan, etc.
- The other equipments with wireless remote control.
- CATV set top boxes
- Multi-media Equipment

Application Circuit



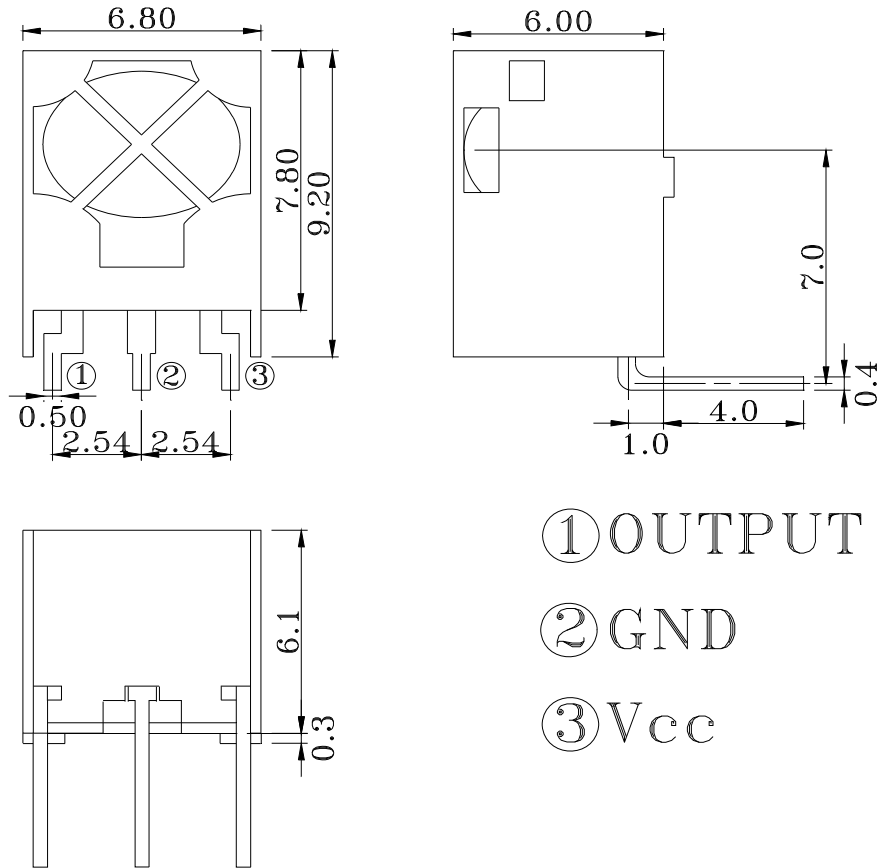
RC Filter should be connected closely between Vcc pin and GND pin.

Block Diagram



Parts Table

Package Dimenstions
(Dimensions in mm)



Notes:

Tolerances unless dimensions $\pm 0.3\text{mm}$.

Infrared Remote Control Receiver Module

IRM-8752K-2

Absolute Maximum Ratings (T_a=25°C)

Parameter	Symbol	Rating	Unit
Supply Voltage	V _{cc}	6	V
Operating Temperature	T _{opr}	-25 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C
Soldering Temperature ^{*1}	T _{sol}	260	°C

*1 4mm from mold body less than 10 seconds

Electro-Optical Characteristics (T_a=25°C and V_{cc}=5.0V)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Consumption Current	I _{cc}	---	---	2	mA	No signal input
B.P.F Center Frequency	F _o	---	36	---	KHz	
Peak Wavelength	λ _p	---	940	---	nm	
Reception Distance	L ₀	8	---	---	m	At the ray axis *2
	L ₄₅	4	---	---		
Half Angle(Horizontal)	Θ _h	---	45	---	deg	
Half Angle(Vertical)	Θ _v	---	45	---	deg	
High Level Pulse Width	T _H	400	---	800	μs	At the ray axis *3
Low Level Pulse Width	T _L	400	---	800	μs	
High Level Output Voltage	V _H	4.5	---	---	V	
Low Level Output Voltage	V _L	---	0.2	0.5	V	

*2. The ray receiving surface at a vertex and relation to the ray axis in the range of θ=0° and θ=45°.

*3. A range from 30cm to the arrival distance. Average value of 50 pulses.

Infrared Remote Control Receiver Module

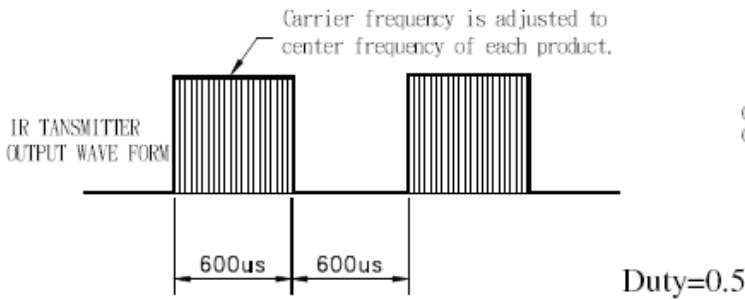
IRM-8752K-2

Test Method

The specified electro-optical characteristics is satisfied under the following Conditions at the controllable distance.

1. Measurement place
A place that is nothing of extreme light reflected in the room.
2. External light
Project the light of ordinary white fluorescent lamps which are not high Frequency lamps and must be less then 10 Lux at the module surface.
($E_e \leq 10\text{Lux}$)
3. Standard transmitter
A transmitter whose output is so adjusted as to **$V_o=400\text{mVp-p}$** and the output Wave form shown in Fig.-1. According to the measurement method shown in Fig.-2 the standard transmitter is specified. However, the infrared photodiode to be used for the transmitter should be $\lambda_p=940\text{nm}, \Delta\lambda=50\text{nm}$. Also, photodiode is used of PD438B ($V_r=5\text{V}$). (Standard light / Light source temperature 2856°K).
4. Measuring system According to the measuring system shown in Fig.-3

Fig.-1 Transmitter Wave Form



D.U.T output Pulse

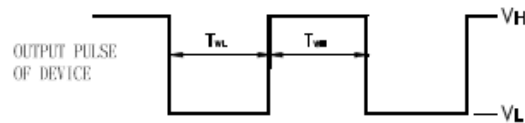


Fig.-2 Measuring Method

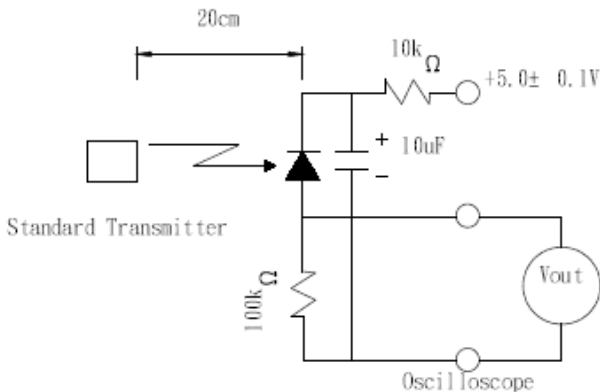
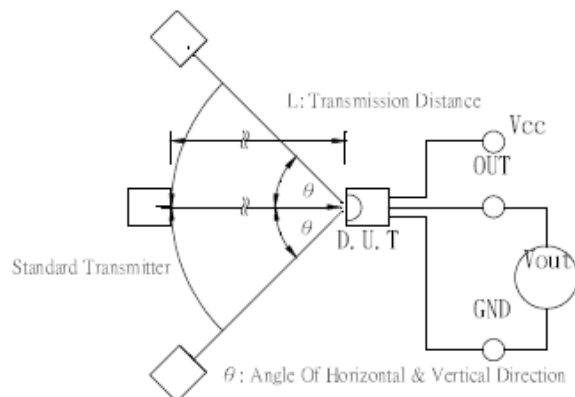


Fig.-3 Measuring System



Typical Performance Curves

Fig.-4 Relative Spectral Sensitivity vs. Wavelength

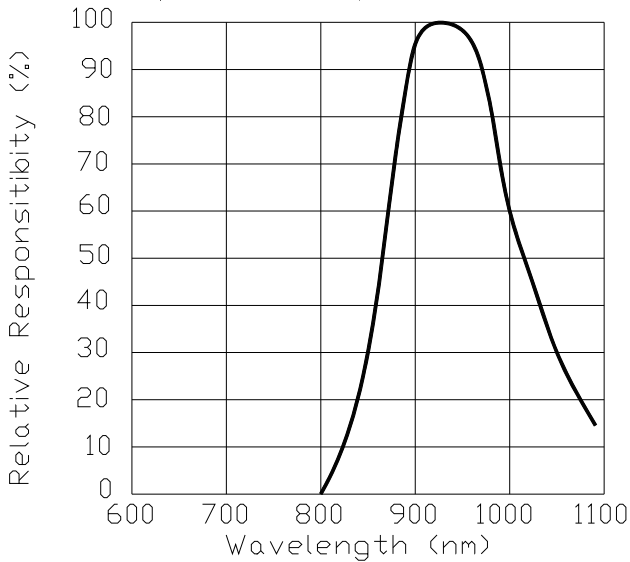


Fig.-5 Relative Transmission Distance vs. Direction

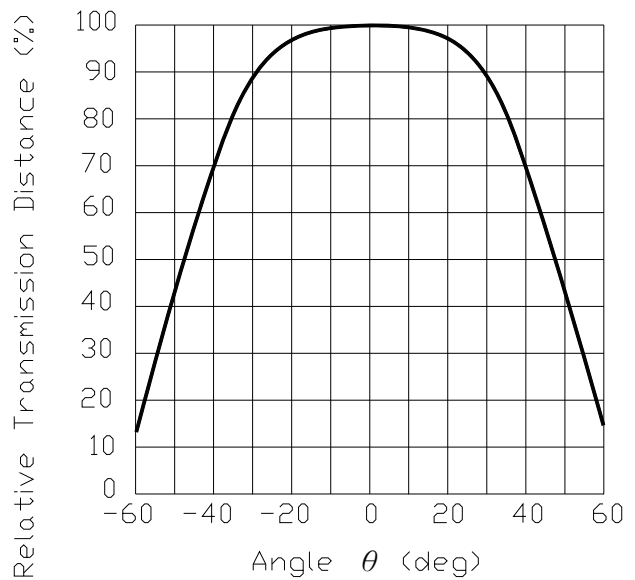


Fig.-6 Output Pulse Length vs. Arrival Distance

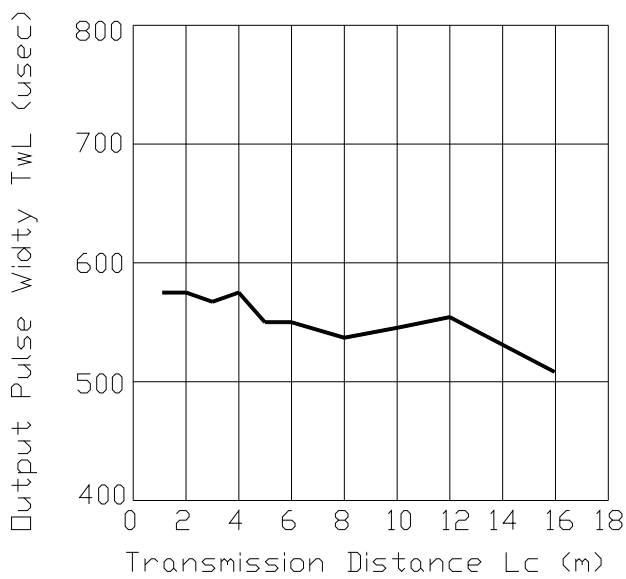
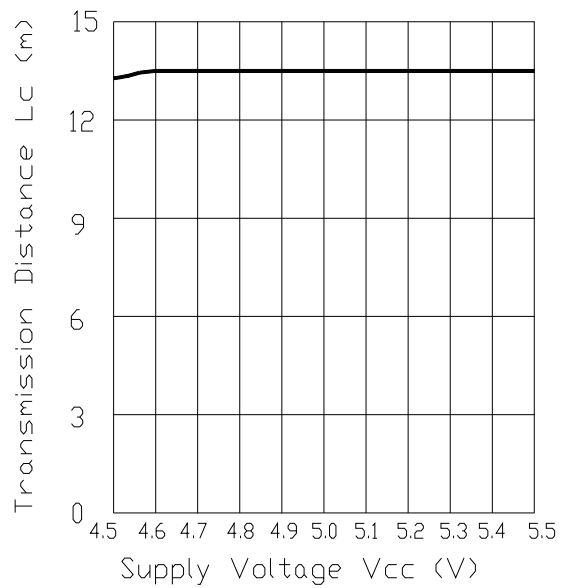


Fig.-7 Arrival Distance vs. Supply Voltage



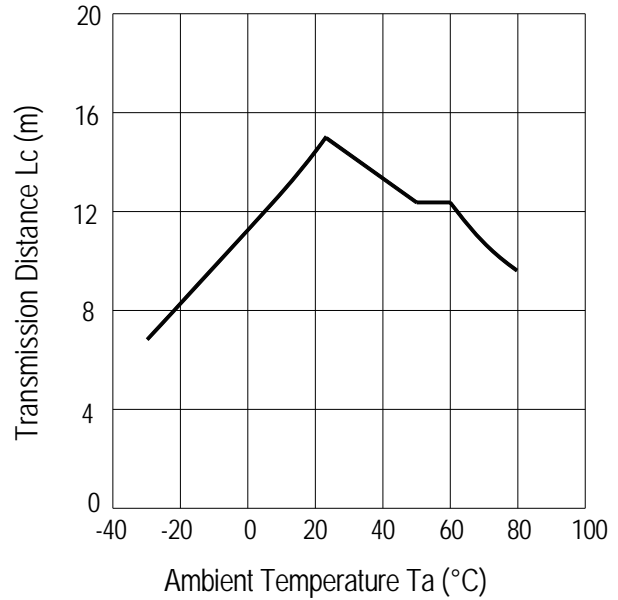
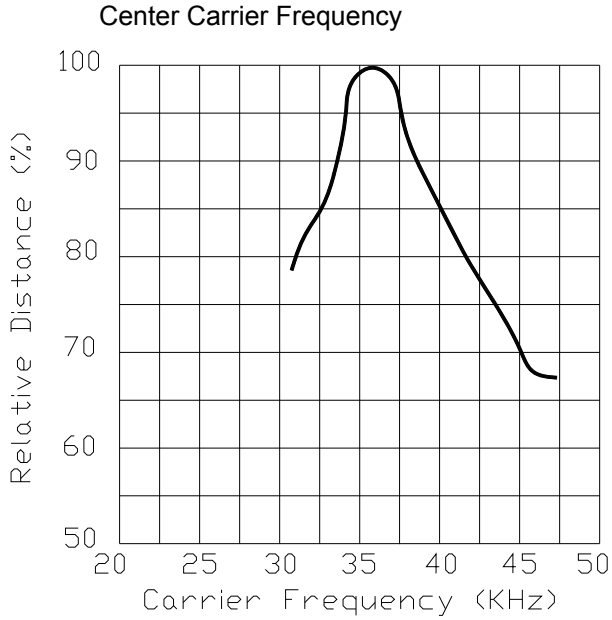
Infrared Remote Control Receiver Module

IRM-8752K-2

Fig.-8 Relative Transmission Distance

vs.

Fig.-9 Arrival Distance vs. Ambient Temperature



Packing Quantity

1000 pcs / Box

10 Boxes / Carton



Infrared Remote Control Receiver Module

IRM-8752K-2

DISCLAIMER

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT. Reproduction in any form is prohibited without the specific consent of EVERLIGHT.