

# 31945-MP

## IR Remote Control Receiver

### IR module for Arduino, Raspberry-Pi and Other Controllers

Mini receiver module using the VD1838B I/R Digital receiver. Designed for remote control systems with the opto PIN diode, pre-amp, filtering, demodulator in one small package. Uses 1 pin of the microcontroller GPIO.

Code libraries, applications and Information & Freeware available through: [www.arduino.cc/en](http://www.arduino.cc/en), [www.raspberrypi.org](http://www.raspberrypi.org) and others. Data Format: Transmitter/Controller dependant

**Power:** 5VDC

**Frequency:** 38KHz

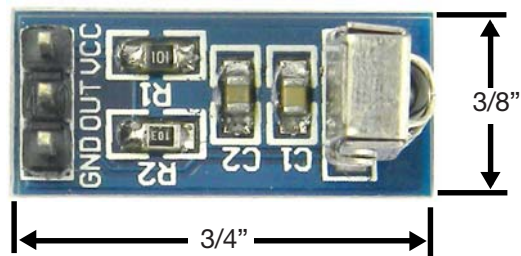
Output: TTL compatible Data, Current Sink

Connection: 3 Pin .1in. Pitch Header

Data I/R signal should follow the following guidelines

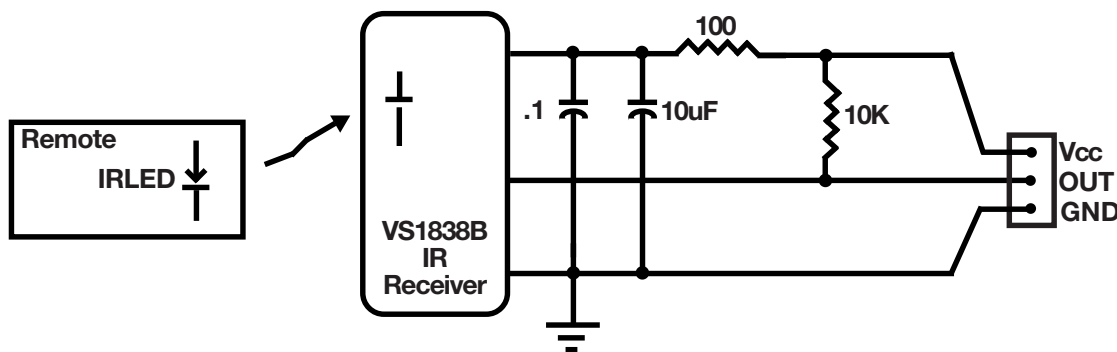
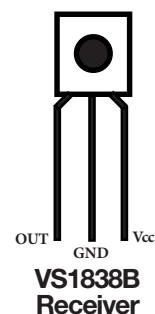
Burst length: >6 Cycles

Gap Length: >9 Cycles (>14ms) at least every 90ms



Conditions: T= 25C Vcc=5V fo= 38KHz Emitter=L51R I/R LED @ 300mA

Parameter	Symbol	Cond.	Min	Typ	Max	Unit
Power	Vcc		2.7	-	5.5	V
Freq. Oper.	Fo		38K			Hz
Bandwidth	Fbw	-3db	2	3.3	5	KHz
1/2Angle	$\theta_{1/2}$			+45		Deg
V output Low	Vol	@Iol.=5mA		0.2	0.4	V
V output High	Voh		4.5			V
Range	L		18	20		M
Supply Current	Icc			0.4	1.5	mA
Pulse Width Low	Tpwl		500	600	700	us
Pulse Width High	Tpwh		500	600	700	us
Temperature	Top		-20	25	85	C°
I/R Wave Length	$\lambda$		900	940	1000	nm



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