

Curso avanzado sobre Arduino: Infrarrojos

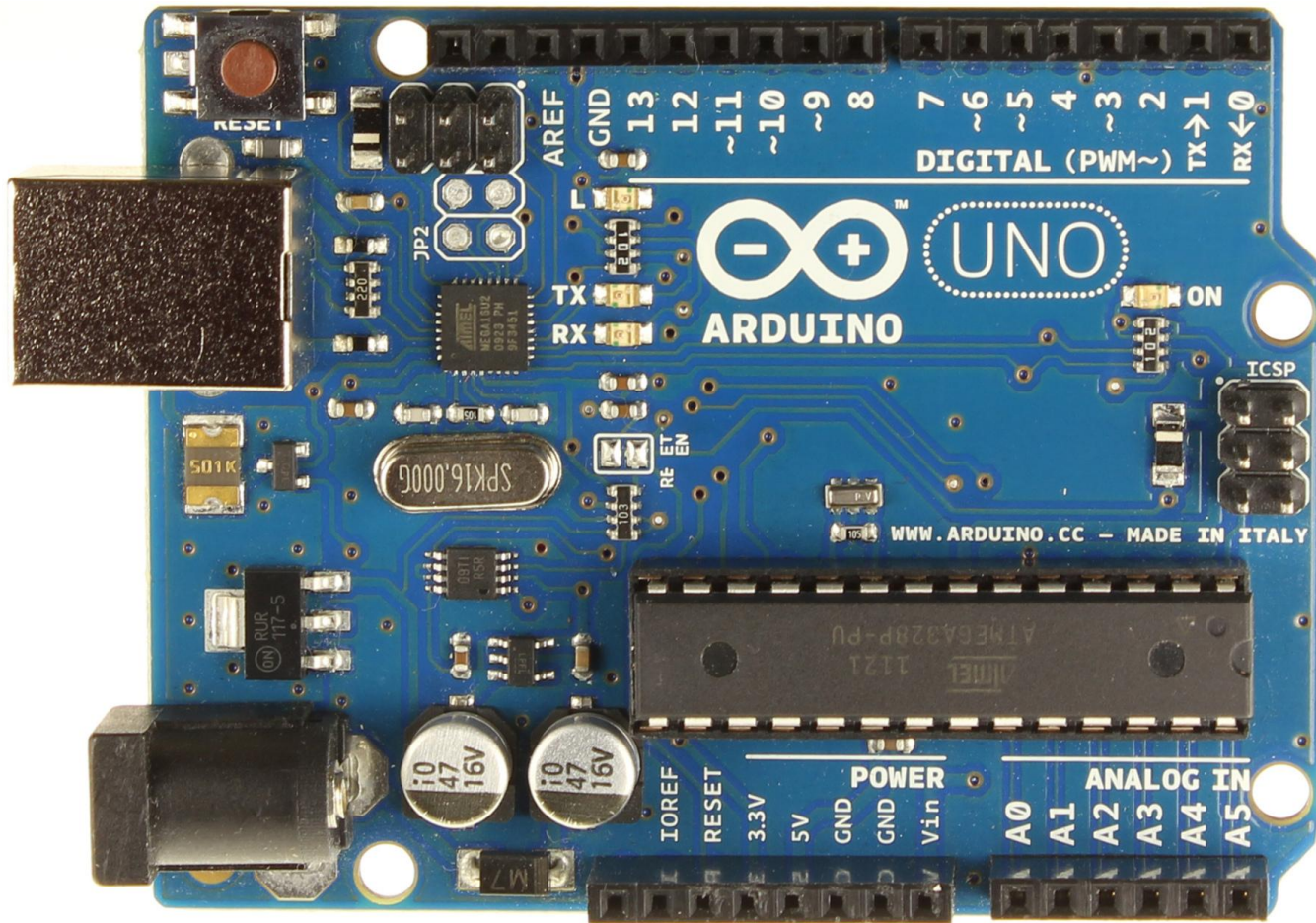
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Introducción a Arduino: Presente



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José Antonio Vacas Martínez

blog
javacasm@elcacharreo.com
twitter
linkedin



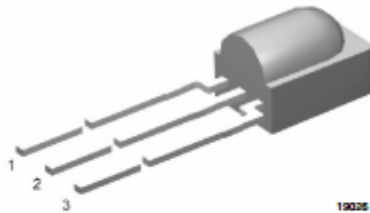
Comunicaciones Infrarrojas



38kHz



Comunicaciones Infrarrojas



MECHANICAL DATA

Pinning for TSOP382..., TSOP384...:

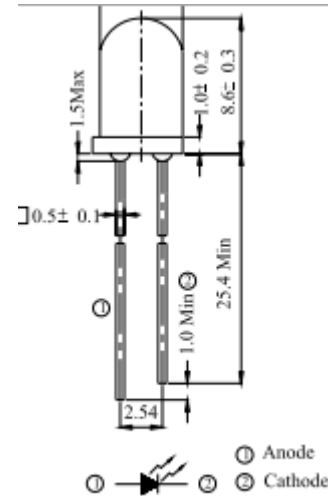
1 = OUT, 2 = GND, 3 = V_S

Pinning for TSOP392..., TSOP394...:

1 = OUT, 2 = V_S , 3 = GND

Receptor
38kHz

PARTS TABLE		
CARRIER FREQUENCY	STANDARD APPLICATIONS (AGC2)	
	PIN	
	1 = OUT, 2 = GND, 3 = V_S	1 = OUT, 2 = V_S , 3 = GND
30 kHz	TSOP38230	TSOP39230
33 kHz	TSOP38233	TSOP39233
36 kHz	TSOP38236	TSOP39236
38 kHz	TSOP38238	TSOP39238
40 kHz	TSOP38240	TSOP39240



Emisor

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Units
Continuous Forward Current	I_F	100	mA
Peak Forward Current	I_{FP}	1.0	A
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-40 ~ +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85	$^\circ\text{C}$
Soldering Temperature	T_{sol}	260	$^\circ\text{C}$
Power Dissipation at (or below) 25 $^\circ\text{C}$ Free Air Temperature	P_d	150	mW

Notes: *1: I_{FP} Conditions--Pulse Width $\leq 100 \mu\text{s}$ and Duty $\leq 1\%$.



Comunicaciones Infrarrojas

Librería: IRremote

```
#include <IRremote.h>

IRsend irsend;

// Sony TV power code
irsend.sendSony(0xa90, 12);
```

```
#include <IRremote.h>

int RECV_PIN = 11;

IRrecv irrecv(RECV_PIN);

decode_results results;

void setup()
{  Serial.begin(9600);
  irrecv.enableIRIn(); // Start the receiver}

void loop() {
  if (irrecv.decode(&results)) {
    Serial.println(results.value, HEX);
    irrecv.resume(); // Receive the next value  }
}
```

<https://github.com/shirriff/Arduino-IRremote>



Conclusiones

Gracias por vuestra atención

