



GP2Y1014AU0F



Application

Air quality/ Pollen and Cigarette Monitoring

Property

Small size/ Light weight/ Easy to install.

Introduction

GP2Y1014AU0F can detect extremely fine particles and is commonly used in air purification systems. It consists of an infrared emitting diode and a phototransistor that detect dust particles in the air by measuring reflected light. The sensor has very low current consumption (maximum 20mA, typical 11mA). Its output is an analog voltage proportional to the measured dust concentration.

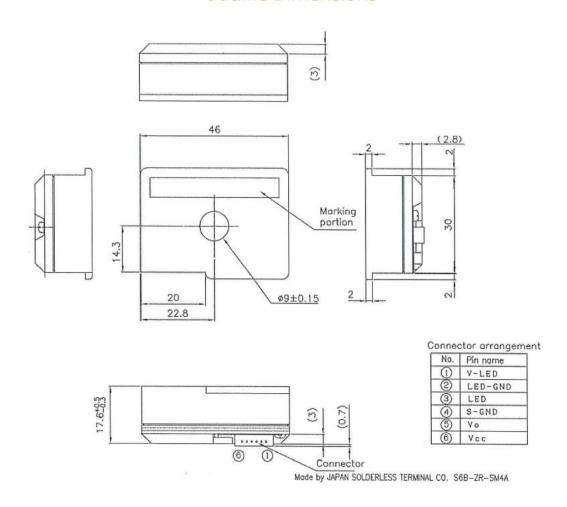
Specifications (T=25°C)

Items	Symbols	
Supply Voltage	Vo	-0.3~7V
Operating Voltage	Vo	5V
Current Rating	lo	11mA
Operating Temperature	To	-10°C ~ +65°C
Storage Temperature	Ts	-20°C ~ +80°C
Sensitivity		0.5 V/(100 ug/m3)
Oitput Voltage range	TXdh	0.6 V(no dust), >3.4V
ILED Terminal Current	lo	11mA

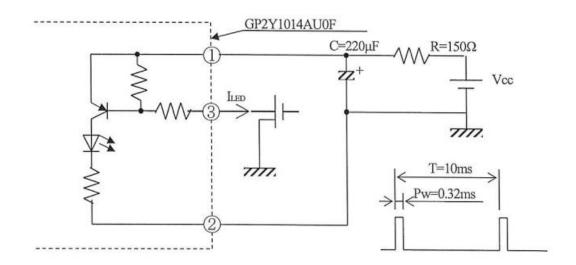


Dust Sensor Series

Outline Dimensions



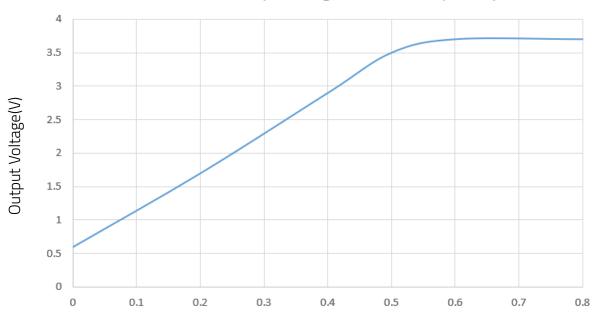
Reference Circuit





Dust Sensor Series

GP2Y1014AU0F output voltage v.s Dust density (example)



Dust Density(mg/m3)