MitchElectronics Ltd.

TRANSISTOR FLASHER

Electronic Kit | Data Sheet

PRODUCT IMAGE	SCAN FOR INSTRUCTIONS PAGE	SCAN FOR RESOURCE PAGE
		

MANUFACTURER	MitchElectronics
COUNTRY OF ORIGIN	United Kingdom
ROHS / REACH COMPLIANT	Yes
PRODUCT DESCRIPTION	In electronics, it is sometimes required to have a signal that consistently creates a continuous pulse (like the second hand on a clock that ticks every second). A circuit that produces a pulse every so often is called an oscillator. Once powered, the output of an oscillator will turn on and then turn off. Once this cycle has been completed it repeats itself indefinitely (so long as there is power). But how is an oscillator made? How do you get some components to keep on pulsing? In this kit, you will be creating a two-transistor oscillator that uses two transistors and a few other components to create an oscillator that generates a few pulses every second so that it flashes (that is why it is called a flasher).

PRODUCT SPECIFICATION:

- Component Count: 12
- Battery Powered?: Yes, 9V PP3
- Operating Voltage: 3V to 16V
- Operating Frequency: Approx 2Hz
- Output Voltage: N/A
- Output Current: N/A
- Dimensions (PCB): 30mm x 26mm
- Mounting Holes: No
- Prebuilt: No – Kit form
- Batteries Not Included

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PARTS INCLUDED:

- 2 x 2N3904
- 2 x 100uF Capacitors
- 2 x 680R Resistors
- 2 x 5K6 Resistors
- 2 x Green LED
- 1 x PP3 Connector
- 1 x PCB

APPLICATIONS

The Transistor Flasher is an ideal kit for beginners who want to practice soldering electronic components to a PCB. While the component count is very low, the variety of components gives a builder the opportunity to read PCB drawings, learn how to solder resistors, capacitors, transistors, and LEDs, and learn how transistor oscillators work. Furthermore, the kit is ideal for use in the classroom as it can be constructed in under an hour, and has an entertaining visual output.

KIT INSTRUCTIONS

https://mitchelectronics.co.uk/resources/transistor-flasher-kit-instructions/

ELECTRONICS CONSTRUCTION MANUAL

https://www.mitchelectronics.co.uk/documents/electronicsConstructionManual.pdf

NOTES

Note that product specifics such as output frequency depend on the tolerance of the components. The numbers provided here are an approximation only. Also take note that the estimated delivery is not guaranteed (unless special delivery is chosen) and free delivery has a maximum waiting time of two weeks. Any product that is returned which is built using lead solder is ineligible for a refund.

All parts sold by MitchElectronics are compliant with RoHS and REACH directives which ensure that they can be used in commercial environments as well as complying with environmental laws.