

# SCULLCOM HOBBY ELECTRONICS

## 5 VOLT PRECISION VOLTAGE REFERENCE UPGRAGE TO GIVE 100mV, 1V, 5V & 10V OUTPUT

### PARTS LIST

- 1 x Intersil ISL21009BFB850Z, Precision 5V Voltage Reference  $\pm 0.5\text{mV}$  3ppm/ $^{\circ}\text{C}$ . (SMD, SOIC8 Package)
- 1 x LT1026 (Linear Technology) - (SMD, SOIC8 Package)
- 1 x INA105 (Texas Instruments) - (SMD, SOIC8 Package)
- 1 x IRF9630 - 'P' Channel MOSFET
- 1 x 2N3904 - General NPN transistor
- 2 x 5v6 1.3w Zener Diode
- 1 x 1N4001 diode (or any general purpose diode)
- 1 x Kingbright 5mm Red/Green LED Tricolour Clear (Manufacturer Part No: L-59EGC)
- 5 x 1K ohm Resistors (either 1% or 5%)
- 1 x 10M ohm Resistor (either 1% or 5%)
- 2 x 6.19K ohm Resistor (0.1%) – recommend WELWYN RC55Y Series Resistor
- 3 x 9.09K ohm Resistor (0.1%) – recommend WELWYN RC55Y Series Resistor
- 2 x 90.9K ohm Resistor (0.1%) – recommend WELWYN RC55Y Series Resistor
- 2 x 100K ohm Resistor (0.1%) – recommend WELWYN RC55Y Series Resistor
- 1 x 910K ohm Resistor (0.1%) – recommend WELWYN RC55Y Series Resistor
- 1 x 100K Trimmer (15 turn) - BOURNS 3006P type or similar
- 1 x 200K Trimmer (15 turn) - BOURNS 3006P type or similar
- 1 x 10uF 25V Electrolytic Capacitor
- 4 x 1uF (25V) Tantulum Capacitor
- 1 x 10uF (16v or 25V) Tantulum Capacitor
- 4 x 0.1uF Capacitor.
- 2 x 0.01uF Capacitor.
- 2 x 220uH Inductor (small)
- 1 x miniature 6 x 6mm tactile switch with suitable knob.
- 1 x Black 4mm Banana Socket
- 1 x Red 4mm Banana Socket
- 1 x Yellow 4mm Banana Socket
- 3 Pole 4 Way Rotary Switch (break before make)
- 4 x 2 pin SIL
- 2 x 2 pin SIL Plug
- 1 x Project Case, ABS, Aluminium Lid Material, 150mm Length, 100mm Width, 60mm (or 50mm) Height.
- 1 x PP3 Battery Holder with Flying Leads (from Rapid Electronics - Order Code: 18-0163) cost £0.35.