Battery Monitor PCB Artwork

PICAXE uP W5USJDrawing 20 Sep '09 Note: This is strictly a mechanical drawing. No Gerber files No silkscreen or solder mask. Intended for use with PCB presensitized for positive artwork (MG Chemicals Process)



This monitor is intended for use with a battery booster.

TB1 is connected to the booster output (load) and TB2 is connected the battery (source).

For use with a single voltage source, e.g., a battery, connect a jumper between the two positive TB runs. Then connect the battery to either terminal block.

A 2-pin hdr/impr installed in the pads between the positive runs allow use as a single battery monitor or with the booster and battery combo.

See the uP program for voltage calibration notes. Calculate for the approximate values then adjust as needed for specfic requirements



Mouser Part Numbers Except U1 and SP1

R0jmpr	0Ω	71-FRJ-50-0	D1	1N5711	511-1N5711
R1	15k 1%	660-MF1/4CC1502F	Alt	BAT85	771-BAT85133
R2	7.5k 1%	660-MF1/4CC7501F			
R3	5k 1%	660-MF1/4CC5101F	U1	PICAXE 08M	PH Anderson
R4, R9	10k 5%	660-CF1/4C103J	U2	Seiko 5V 2%	628-812C50AY-G
R5, R6	680 5%	660-CF1/4C681J			
R7	180 5%	660-CF1/4C181J	LED1	Dual R/G	604-WP59EGW
R8	22k 5%	660-CF1/4C223J			
			SP1	CEM-1201(42)	DigiKey 102-1151-ND
C1	.1 Cer	80-C320C104K5R			
C2, C4	10uf	140-L25V10-RC	TB1,2	Kobicon	158-P02EK500A2-E
C3tant	2.2uF	581-TAP225K016SCS			
			SW1	Mini DPDT	

1x Positive Artwork (flipped for printing on transparencies)

