

Material List - LED Alternating Flasher Circuit

Identifier	Description	Qty Req	Newark.com Part #	Included in project kit?
	4" x 6" x 3/4" Piece of plywood or MDF	1		no
	nails (1 - 1/2" ardox standard - not galvanized)	17		no
	copper wire - solid (22 - 16 gauge will do)	~300mm		yes
	insulated wire - solid (22 - 16 gauge will do)	~150mm		yes
R1,R2	470 ohm 1/4w resistor	2	38K0375	yes
R3,R4	4.7k ohm 1/4w resistor	2	38K0376	yes
C1,C2	47 uF x 16v capacitor - axial leads	2	79K3617	yes
LED1,LED2	Light Emitting Diode	2	26M0031	yes
T1,T2	Transistor NPN 2N3904	2	84K8839	yes
B1	9v Battery	1		no
BC1	9v Battery clip	1	31M0724	yes
	solder			no
	paper glue			no
	zip ties for holding battery in place	2	24M8799	yes

Tool List - LED Alternating Flasher Circuit

safety glasses

drill w/ small drill bit & 3/16" bit

hammer

soldering iron

wire cutter, wire stripper

fine sandpaper or steel wool