

LED Flasher parts list

Part	Supplier	Part no		URL	Cost per	Qty \$100+	Notes	Original manufacturer and part number
	Battery Holder and alternatives		Note					
AA PCB Mount battery holder	Altronics	S5027	Have only tried this one on the prototype board	https://www.altronics.com.au/p/s5027-2-x-aa-pcb-mount-flat-battery-holder/	\$1.10	\$0.80	12.5mm pin spacing	http://www.comf.com.tw/ProductDetail.asp?no=35 BH321-1P
	Digikey	BC2AAPC	Alternative	https://www.digikey.com.au/product-detail/en/mpd-memory-protection-devices/BC2AAPC/BC2AAPC-ND/455777			13.6mm pin spacing	
	mouser.com	12BH321P-GR	Alternative	https://au.mouser.com/ProductDetail/Eagle-Plastic-Devices/12BH321P-GR?qs=F1cS1ynZVj3o9vjUiYx4Gg%3D%3D			13mm pin spacing	
	Any other 2 * AA battery holder with leads will also do, as there are holes for the wires just above the PCB mount holes, But the ones with PCB pins are cheaper and easier to use in this circuit, and are more robust as there will be no leads left hanging to be broken off.							
Notes	Use double sided tape to hold the battery holder on to the board regardless of the type used, to take the strain off the pins when the batteries are replaced							
	The holes for the PCB mount are slotted to accomodate different pin spacings - the only holder i have tried is the Altronics one with a spacing of 12.5mm							
Double sided tape	Have a look at Repco, or Supercheap Auto or the following. 19-24mm wide, tape 2mm thick (may have to use 2 - 1mm layers). But you only need a 10mm long section so 1 roll goes a long way			http://www.handyhardware.com.au/double-sided-adhesive-tapes/ T1A is what I use, 2M long (will do 200 Kits), 24mm wide and 2mm thick \$8 for a role.	0.04	0.04		
AA battery (2)	Coles				1.10	1.1		
Superbright LEDs	Diffuse Led's seem to be the most visible day and night, and these ones also have a wide viewing angle							
	I have tried the following colours in this circuit 5mm diffused normal case (not the long case)							
	Ledsales	5MM_DIFF_AMB	Amber colour	https://www.ledsales.com.au/index.php?main_page=product_info&cPath=148_152_154_252&products_id=1407	\$0.20	\$0.12		
		5MM_DIFF_RED	Red colour	https://www.ledsales.com.au/index.php?main_page=product_info&cPath=148_152_154_252&products_id=2229				
		5MM_DIFF_ORG	Orange colour	https://www.ledsales.com.au/index.php?main_page=product_info&cPath=148_152_154_252&products_id=1440				

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Resistors	NOTE: Hole spacing on the PCB for the resistors is 10mm, so only use 1/4w resistors as these have a 6.8 mm body width.							
	Also use the brown coloured carbon film 5% resistors not the blue/green as its easier to see the colours against the brown background							
R1	100 ohm ¼ w		can get these for a few cents each in bulk	https://www.altronics.com.au	0.06	0.06		
R2	220k ¼				0.06	0.06		
R3	1.5k 1/4w				0.06	0.06		
Note	Recommend using ¼ carbon film as it is easier to see the difference in the colour bands than on the metal film							
Capacitor	Altronics			https://www.altronics.com.au/p/r5065-lelon-10uf-35v-pcb-electrolytic-capacitor/	0.3	\$0.15		
7555	Element 14			https://au.element14.com/renesas/icm7555ipaz/ic-timer-cmos-7555-dip8/dp/9663762?scope=partnumberlookahead&ost=ICM7555IPAZ&searchref=searchlookahead&examfpn=true&ddkey=https%3Aen-AU%2FElement14_Australia%2Fw%2Fsearch	\$1.18	\$0.85		
8 Pin IC Socket	Element 14			https://au.element14.com/multicomp/spc15494/dip-socket-8pos-2row-2-54mm-th/dp/2668408?st=8%20pin%20ic%20socket	\$0.23	\$0.23		
Kapton Tape	Altronics	1 roll will do about 300 kits	Check ebay, may be able to get it cheaper	https://www.altronics.com.au/p/2976a-36mm-x-33m-high-temperature-polyimide-tape/	\$0.10	\$0.10		
Board	JLPCB				\$2.00	\$1.00		
Mylar bags	eBay			https://www.ebay.com.au/itm/100-x-Silver-Clear-Tough-Mylar-Stand-up-Bags-Zip-Lock-Reseal-Ziplock-Bag-13x18cm/222619551314	\$0.18	\$0.18		
				Total - Cheapest prices	\$6.57	\$4.59		