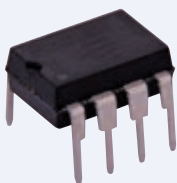


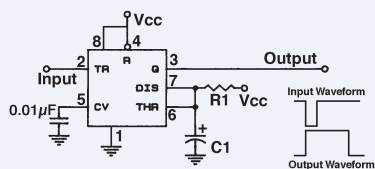
The NE555 Timer

The 555 timer is one of the most versatile devices in electronics. There are many books devoted to it with thousands of application circuits published since its release. It can function in monostable (one shot) mode, or in astable mode, where it continues running at a user-set frequency. Power supply (Vcc) can be between 4.5V and 16V DC.



Mono Stable Multivibrator

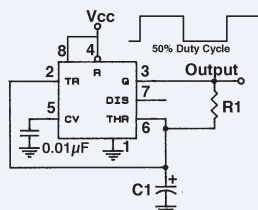
This simple circuit has a main use as a 'wave generator'. When a pulse is applied to pin 2, a pulse of T seconds is produced at pin 3.



$$T = 1.1 \times R1 \times C1$$

Astable Multivibrators Fixed Duty Cycle

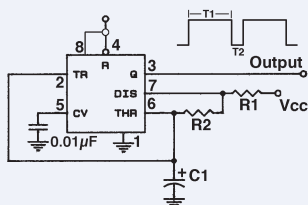
This is a great circuit for when a simple 50 / 50 oscillator is required. Once power is applied it is free running with a 50 % duty cycle. For more accurate timing use a CMOS type 7555 timer.



$$f = \frac{0.7}{R1 \times C1}$$

Adjustable Duty Cycle

This neat circuit will give output pulses of t1 seconds in length at an interval of t2. Shown are four formulas which will add the calculation of R1, R2 and C1 once the value of t1 and t2 have been chosen.

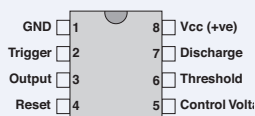


$$t1 = 0.693 \times (R1+R2) \times C1$$

$$t2 = 0.693 \times R2 \times C1 = \frac{1}{f}$$

$$f = \frac{1.44}{[(R1+(2 \times R2)) \times C1]}$$

$$\text{Period } T = 0.693 \times (R1 + (2 \times R2)) \times C1$$



Timer Integrated Circuits



ROHS

Price Each	RRP	10+	25+
Z 2755 NE555 Timer IC	1.30	1.20	1.00
Z 2758 NE556 Dual Timer IC	1.80	1.60	1.30

Miscellaneous ICs



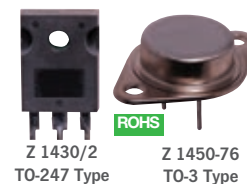
ROHS

Price Each	RRP	10+	25+	
Z 1104 IHW15N120E1XKSA1 Infineon IGBT	new	7.80	7.35	6.80
Z 1107 IGP01N120H2 Infineon IGBT	new	4.95	4.65	4.30
Z 1543 IRF9540NPBF TO-220 P-Channel MOSFET	new	3.95	3.60	3.20
Z 2808 SSM2141 Differential Line Receiver	12.95	11.95	10.50	
Z 2640 LM2917 Freq. to Voltage Conv.	4.95	4.45	3.45	
Z 0590 UC3906 Gell cell power controller	13.95	13.00	12.20	
Z 2935 DAC0800 Digital to Analog converter	4.95	4.25	3.85	
Z 3030 DG509ACJ-Dual 4 CH Analog. mux.	6.95	6.50	5.75	
Z 7250 MC34063 DC to DC controller	3.10	2.80	2.15	
Z 7252 MC34064P-5 5V Under-voltage sensor	3.10	2.80	2.15	
Z 7275 UGN3503UA Hall Effect Sensor	5.50	4.95	4.50	
Z 7285 DS1302+ Trickle charge/time keeping controller	4.95	4.50	3.95	
Z 7288 DS1809-010+ Digital Pot	9.95	9.30	8.50	
Z 9190 MAX232 RS232 Driver tx/rx	4.50	4.10	3.75	
Z 9194 MAX485 RS-485/RS-422 transceiver	5.95	5.15	4.35	

FETs & Transistors

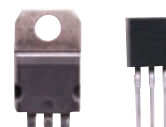
Exicon Power MOSFETS

For high-power audio and industrial linear amplifiers. Excellent frequency characteristics. The TO-3 EXICON Mosfets, whilst not direct equivalents to the Hitachi® parts, will suit most circuits with only minor modifications. Full specifications are available upon request.



Price Each	Hitachi Part	Exicon Part	Type	(V) Bv	(A) Id	(W) Pd	RRP	4+	10+
Z 1450	2SK134	ECF10N16	N	160	8	125	15.70	14.15	12.55
Z 1452	2SJ49	ECF10P16	P	160	8	125	15.70	14.15	12.55
Z 1456	2SJ56	ECF10P20	P	200	8	125	16.75	15.10	13.40
Z 1474	2x2SK176	ECF20N20	N	200	16	250	28.30	25.50	22.65
Z 1432		ECX10P20	P	200	8	125	17.95	16.20	12.55

MOSFETs (N Channel)

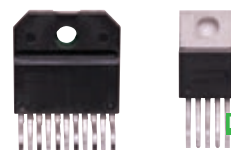


All N Channel. Supplied loose.

ROHS

Price Each	Rating	Package	RRP	10+	25+
Z 1123 MTP3055V MOSFET	60V 12A	TO-220	3.15	2.90	2.55
Z 1537 IRF540N MOSFET	100V 33A	TO-220	5.90	5.20	4.10
Z 1538 IRF1540N MOSFET	100V 17A	TO-220	1.95	1.75	1.40
Z 1539 IRF740 MOSFET	400V 10A	TO-220	3.70	3.30	2.60
Z 1545 IRF1405 MOSFET	55V 75A	TO-220	5.90	5.20	4.10
Z 1555 2N7000 TMOSET	60V 0.2A	TO-92	0.70	0.65	0.50
Z 1100 STW75NF20 MOSFET	200V 75A	TO-247	6.60	6.25	5.75

Amplifier Integrated Circuits



ROHS

Price Each	Package	RRP	10+	25+
Z 2546 LM380 2.5 Watt Power Amplifier	DIL-14	2.70	2.40	2.15
Z 2554 LM384 5 Watt Power Amplifier	DIL-14	4.50	4.05	3.75
Z 2556 LM386 1 Watt Low Voltage Amplifier	DIL-8	2.05	1.85	1.45
Z 2599 LM1875 20W Audio Amplifier	5 Pin TO-220	6.85	6.15	5.50
Z 2896 LM3876 40 Watt Audio Amplifier	11 Pin TO-220	11.95	10.50	9.95
Z 2898 LM3886TF 50 Watt Audio Amplifier	11 Pin TO-220	10.95	10.20	9.65

SCRs / Triacs



ROHS

Price Each	Package	RRP	10+	25+
Z 1768 C106D SCR 400V/4A	TO-126	1.90	1.70	1.35
Z 1778 TYN816 SCR 800V/16A	TO-220A	4.00	3.75	3.50
Z 1710 BT136/500 TRIAC 500V/4A	TO-220A	2.05	1.85	1.35
Z 1712 BT137/500 TRIAC 500V/8A	TO-220A	2.80	2.50	1.95

Transistor Component Pack

A packet of 100 pieces of common variety transistors. T-0220 and T-092 packages, PNP and NPN types. Pack includes:
 BC327 PNP 20pcs
 BC337 NPN 25pcs
 BC548 NPN 25pcs
 BC557 PNP 20pcs
 TIP32C PNP 4pcs
 TIP31C NPN 6pcs



Price Each	RRP	4+	4+
R 3530	19.95	18.00	18.00