Components & Accessories

FS90 Mini Servo 120° 9g

FEETECH

£4.07
Order code 37-1339

PIC16F84A-04/P Microcontroller
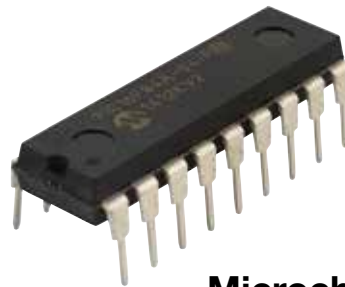
Microchip

£5.22
Order code 73-2634

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GET CABLE READY WITH

UNISTRAND®
cable

S8ZГq IR ∩08Z 3mδOГ Г-W

Equipment wire 7/0.2mm

Equipment Wire 16/0.2mm

Equipment wire 32/0.2mm

Tinned Copper wires
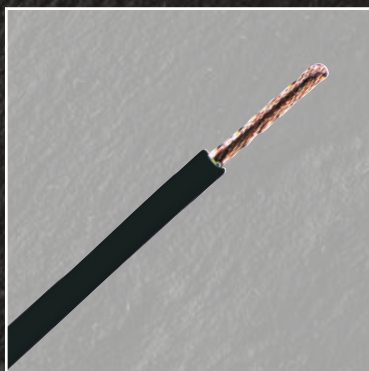
Tri-rated cable

HeatShrink

To see our full range of UniStrand products go to www.rapidonline.com/UniStrand

sales@rapidonline.com

Wire & Cable

UNISTRAND cable
Loudspeaker Cable

A heavier duty cable with a 'figure 8' profile offered in a variety of colours.

- Ideal for speaker connection
- 13/0.18mm copper stranded conductor with clad copper aluminium strands (CCA)
- Rating 60V rms 2.5A
- Overall size 3.8 x 1.9mm
- Available with white, grey or black PVC outer sheath with white ribbed polarity identification marking
- Supplied on **reels of 100m**

For technical specialisation visit **www.rapidonline.com**

| Type	Order code	1+
100m White 13/0.18	**01-0150**	30.69
100m Black 13/0.18	**01-0155**	27.39
100m Grey/blk 13/0.18	**01-0153**	24.32

62346

UNISTRAND cable
Nichrome Wire

This **nichrome wire is ideal for use in applications requiring a heating element** and can be used for ignition in applications such as fireworks and pyrotechnics.

- Suitable for producing heating elements
- Weight of reels 125g

For technical specialisation visit **www.rapidonline.com**

SWG	dia. (mm)	Order code	1+
14	2.01	**05-0490**	31.10
16	1.62	**05-0495**	31.10
18	1.22	**05-0500**	25.92
20	0.91	**05-0505**	31.10
22	0.71	**05-0510**	31.10
24	0.56	**05-0515**	31.10
26	0.46	**05-0520**	25.92
28	0.38	**05-0525**	31.10
30	0.32	**05-0530**	31.10
32	0.27	**05-0535**	31.10

62487

UNISTRAND cable
Tinned Copper Wire

A reel of tinned copper wire.

- Supplied on **reels of 500g**

For technical specialisation visit **www.rapidonline.com**

SWG	Length (m)	Order code	1+
14	17	**05-0295**	17.67
16	27	**05-0300**	18.38
18	48	**05-0305**	18.38
20	66	**05-0310**	17.67
22	140	**05-0315**	18.38
24	230	**05-0320**	18.38
26	340	**05-0325**	17.67
28	490	**05-0330**	18.38
30	780	**05-0335**	20.07
32	914	**05-0340**	17.80
34	1285	**05-0350**	6.23
38	3182	**05-0360**	20.01

62485

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24 hours a day

UNISTRAND cable
Enamelled Copper Wire

A wide range of enamelled copper wire for winding transformers and coils, etc.

- Supplied on **reels of 500g**

Warning: This product contains modified polyurethane.

For technical specialisation visit **www.rapidonline.com**

Type	Approx. length (m)	Order code	1+
35/36	1850	**05-0200**	21.48
34/35	1450	**05-0205**	17.76
34	1250	**05-0207**	21.66
33	1120	**05-0210**	22.03
30	720	**05-0215**	20.44
27	450	**05-0220**	19.08
25	290	**05-0225**	18.82
24	230	**05-0230**	18.82
22	140	**05-0235**	18.82
20	100	**05-0240**	18.82
18	45	**05-0245**	18.09
16	28	**05-0250**	18.82

62484

UNISTRAND cable
1/0.6 Single Core Def Stan 61-12 Part 6 Equipment Wire on 100m Reels

This wire has a solid core and is ideal for plate wiring (running wires across a chassis with all wires straight or at right angles to one another). It remains in formed shape without cable ties.

It is also useful for making jumper cables for solder-less plug-in breadboard.

- Wide range of colours
- 1/0.6mm copper conductor
- PVC insulation
- Overall diameter 1.2mm
- Rating 1kV rms
- Max. operating temperature 85°C
- Weight of reel approx 400g
- Complies with **Def Stan 61-12 part 6**
- Supplied on **reels of 100m**

Type	Order code	1+
Black	**01-0601**	9.09
Blue	**01-0603**	9.09
Brown	**01-0604**	9.09
Green	**01-0609**	8.84
Grey	**01-0611**	8.84
Orange	**01-0613**	9.09
Pink	**01-0614**	9.09
Red	**01-0616**	9.09
Violet	**01-0617**	9.09
White	**01-0619**	9.09
Yellow	**01-0620**	9.09

62317

Cable Management

HellermannTyton
Heat Shrinkable Tubing 3:1, Kit ShrinKit 321 Basic 380-03001

The **HellermannTyton ShrinKit Basic 321 Kit** consists of heat shrink tubing assortments in an attractive and handy assembly kit. The ShrinKit 321 Basic kit contains five different sizes of heat shrink. With a ratio of 3:1 these products replace many differently sized tubing solutions by fitting almost any heat shrink requirement.

Choosing the required product is simplicity itself, as the heat shrink tubings are clearly identified by size, length and content printed on every compartment of the assortment box.

- Compact and handy kit
- Black tubing
- Application range from 1.5 mm to 18(Ø)mm
- 220 pre-cut pieces in five sizes
- Shrink Ratio: 3:1
- Operating Temperature: -55°C to +135°C
- Minimum shrink temperature: +90°C
- Longitudinal change after shrinkage: +5% /-10% max
- Dielectric Strength: 20kV/mm according to ASTM D 2671
- Flammability: Self extinguishing
- Insulation Class: B (VDE 0530)
- Specifications: SAE - AMS - DTL-23053/5 Class 1
- Supplied in **black**
- Manufacturer's part: **Hellemann 380-03001**

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+
ShrinKit Basic	**49-6347**	19.73

532706

Anvil Hand tools
AV-CTTG Cable Tie Tension Gun

The Anvil AV-CTTG is a heavy-duty tool suitable for continuous use due to its quality construction and all-metal body.

- Ratchet mechanism for tightening and tensioning
- Cuts cable ties with widths between 2.4 and 4.8mm, and up to 1.6mm thick
- Carbon steel cutter material
- Aluminium body material
- **Anvil type AV-CTTG**

Type	Order code	1+	10+	25+
Cable tie tensioner	**86-0522**	24.40	21.97	19.31

561727

UNISTRAND cable
Midi Double Cable Dispenser

This midi double cable dispenser has an all metal construction and is a rugged and durable unit that is designed for cable/wire/coil reels up to 124mm, making dispensing quick and simple.

- For bench or wall mounting
- Metal frame
- Spindles are made from stainless steel

Note: *Cable/wire/coil reels not supplied*

Type	Order code	1+
Cable dispenser	**02-0314**	38.59

566901

USB Connectors

TruConnect®
USB Type C Cables

These USB3.1 cables (also called Gen.2) bring many improvements to the previous standard USB3.0 (Gen.1). The most noticeable is the new Type-C connectors which are much smaller than the previous standard connectors (except Micro B). They are also symmetrical allowing you to plug them in either way up.

The new Type-C Alternative Mode allows the USB cable to carry different types of signal, including native DisplayPort capable of 4k resolution video.

● Type C reversible connectors
● Range of output connectors

Type	Order code	1+
USB A male, 1m	**16-1737**	5.18
Displayport male 15cm	**16-1738**	3.75
HDMI male, 15cm	**16-1739**	15.20
HDMI male, 2m	**16-1740**	21.34
DVI-D male, 15cm	**16-1741**	7.09
VGA male, 15cm	**16-1743**	14.50

568718

TruConnect®
USB2 Cable Assemblies

A range of USB 2.0 leads and cables for connecting peripheral devices such as printers to PCs.

● Data transfer rate of 480Mb/s
● Backwards compatible with USB 1.1 devices
● Cables with LEDs can be used to check connections
● On-the-go (OTG) cables can connect two devices without needing to go via a PC
● Available in different lengths and with male or female connectors

Type / length	Colour	Order code	1+	10+	50+
A male to B male					
AM to BM 2m	Beige	**19-8660**	5.15	4.59	
AM to BM 3m	Beige	**19-8662**	6.13	5.24	
AM to BM 3m	Black	**19-8663**	2.00	1.79	
AM to BM 5m	Grey	**19-8664**	8.79	7.54	
AM to BM 5m	Black	**19-8665**	9.09	7.85	
A male to A female					
AM to AF 0.5m	Black	**45-4007**	1.01	0.758	0.664
AM to AF 2m	Beige	**45-4006**	3.38	2.99	1.68
AM to AF 3m	Beige	**45-4008**	5.74	5.10	
AM to AF 5m	Beige	**45-4010**	7.13	6.15	
A male to B male mini					
AM to Mini BM 2m	Black	**45-4021**	4.59	4.34	
AM to Mini BM 2m	Beige	**45-4012**	4.70	4.20	
A male to A male					
AM to AM 2m	Beige	**45-4016**	3.90	3.44	
AM to AM 2m	Black	**45-4017**	2.58	2.30	
AM to AM 3m	Beige	**45-4018**	7.54	6.74	
AM to AM 5m	Beige	**45-4020**	8.10	7.02	

72434

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TruConnect®
USB 2.0 Type A to Micro B Cable - 1m

A USB 2.0 type A to micro B data cable for connecting devices such as mobile phones and digital cameras equipped with a micro USB port. Suitable for use with BBC Micro:bit

● Length 1m
● Colour: black

Type	Order code	1+
USB A to micro B, 1m	**45-4009**	1.51

563834

TruConnect®
USB to Serial (DB9) Adaptor

This adaptor is used to connect serial devices to a PC or laptop USB port. It consists of a USB A type plug on one end and a male 9-pin serial connector on the other. It has been made from high quality cable, strain relief and moulded connectors.

● Easily connect your 9-pin serial device to a USB port
● Operates as a bridge between one USB port and a standard RS-232 serial port
● Power adaptor is not required; draws its power from the USB connection
● Prolific PL2303HX D Chipset
● Supports Windows 2000, Windows XP, Windows Vista, Windows 7, Win 8, Mac 10.4/5
● Length 1.2m (approx.)

Type	Order code	1+
USB to Serial	**19-8791**	7.18

81170

▶ av:link
USB 2.0 Cables

Standard USB 2.0 plug to plug leads, suitable for connection of printers, hubs, audio devices, etc., to A PC.

● Black coloured cable
● Cable diameter 4.3mm
● Cable type 4x0.15mm CCA + 32x0.10 CCA Braid, Cotton Reinforced
● Available in A to A and A to B options
● Length 1.5m

Type	Order code	1+
USB cable A-A 1.5m	**35-4758**	1.79
USB cable A-B 1.5m	**35-4757**	1.94

400281

PIMORONI
CAB0400 USB to UART TTL Serial Console Cable Assembly

This USB to UART cable assembly is the simple way to access a Raspberry Pi from a laptop or computer, without having to use a screen, keyboard, mouse, network configuration, etc. With this single cable you can directly connect to the serial console of your pi as well as powering it. Essential for where USB ports/ethernet sockets are limited or missing.

Windows and Mac drivers are available. Install them just plug in the cable and fire up a terminal emulator program. We recommend PuTTY for Windows, it's free and easy to use.

● Length 90cm
● Enables serial console communication
● Powers your Raspberry Pi
● Plugs directly into the GPIO header
● Use a terminal emulator to access your Pi

Type	Order code	1+
USB to UART cable	**75-0612**	5.80

565285

StarTech.com
Hard-to-find made easy®
USB 2.0 A To B Cables - M/M

The **StarTech.com range of USB A to B cables** feature 1 x USB A male connector and 1 x USB B male connector, providing a USB 2.0 connection to peripherals such as USB printers, scanners or external USB hard drives. Available in lengths from 500mm to 15m to suit your application. The longer cables have active signal equalisation to allow them to exceed the standard 5m USB cable limitation.

Backed by StarTech.com lifetime warranty.

● High quality USB A and USB B connectors
● Supports USB 2.0 data transfer rates up to 480 Mbps
● Cable jacket type: PVC - polyvinyl chloride

Type	Order code	1+
1m	**19-8943**	2.94
2m	**19-8945**	3.40
10m	**19-8949**	26.78
3m	**19-8951**	4.36
15m	**19-8953**	41.96
0.5m	**19-8955**	2.06
5m	**19-8957**	5.42

562864

StarTech.com
Hard-to-find made easy®
Mini USB 2.0 Cables - A To Mini B

The **StarTech.com range of Mini USB 2.0 A to Mini B Cables** provide high-quality replacements for the cable that came with your Mini USB mobile device. The cables are perfect for connecting devices such as your smartphone, GPS, digital camera, or portable hard drive, to your PC or Mac computer for everyday tasks such as charging, data synchronization or file transfers. Available in a range of lengths and with straight or right angle connectors.

Keep as a spare cable, perfect for use on the road with a laptop.

Backed by StarTech.com lifetime warranty.

● Cable jacket type: PVC - polyvinyl chloride
● Interface type & rate: USB 2.0 - 480 Mbit/s

For technical specialication visit **www.rapidonline.com**

Length	Angle	Order code	1+
150mm	Straight	**19-8971**	2.41
500mm	Straight	**19-8967**	1.92
1m	Straight	**19-8961**	2.53
1.8m	Left	**19-8973**	2.66
2m	Straight	**19-8963**	3.34

562865

StarTech.com
Hard-to-find made easy®
Lightning Connectors

These **Lightning to USB Cable for iPhone, iPod, and iPad from StarTech.com** provide a reliable solution for charging and syncing Apple® mobile devices with your PC or Mac® computer.

They are available with a choice of straight or angled connectors in black or white and in a range of cable lengths. These durable cables are Apple MFi certified and backed by a **2-year warranty**.

Type	Order code	1+
Black 1m	**19-9045**	18.90
White 1m	**19-9049**	18.32
White 1m angled	**19-9051**	17.69
Black 2m	**19-9055**	19.67
Black 2m angled	**19-9057**	19.50
White 1m	**19-9059**	19.81
White 1m angled	**19-9061**	19.53
Black 3m	**19-9073**	23.70
White 3m	**19-9077**	27.30

562912

Display Port Cable Assemblies

TruConnect®

Display Port Male to Male Cables V1.2 – Black

DisplayPort is a 20-pin connector similar to HDMI but designed to replace DVI/VGA. It is used to connect a DisplayPort output such as a graphics card to a monitor.

- DisplayPort male to DisplayPort male
- Bi-directional
- DisplayPort gold-flashed 20-pin latching connectors
- Fully shielded cables
- 28 AWG
- Available in 2m and 3m lengths

Length	Order code	1+
2m	**16-1722**	4.54
3m	**16-1723**	6.14

568708

HDMI Cable Assemblies

TruConnect®

16-1728 2m Display Port M HDMI M Black Cable

This DisplayPort to HDMI cable is the perfect solution for adapting your DisplayPort computer or graphics card to use an HDMI monitor/device/TV.

DisplayPort is a 20-pin connector similar to HDMI but designed to replace DVI/VGA. The standard was put forward by VESA to define a new royalty free audio/video connection.

- Display port v1.1 compliant
- Passive cable
- HDMI V1.3b compliant
- Enable high quality optional digital audio transmissions
- Supports a full 1080P resolution
- 24-bit colour depths
- Colour: black
- Length: 2m

Type	Order code	1+
DisplayPort to HDMI	**16-1728**	7.68

568713

Pricing
Pricing correct at time of going to press.
For up-to-date pricing visit
www.rapidonline.com

TruConnect®

HDMI to Micro Cable Assembly 2m with Gold Connectors

This HDMI to Micro Cable Assembly has a Micro (Type D) connector which retains the standard 19 pins used in the Type A connector but measures just 2.8mm x 6.4mm. The Micro connector can be used on mobile phones and other similar portable devices while the other end of the 2m cable has a standard connector for connecting to TVs and projectors.

- HDMI ethernet channel
- Supports 3D over HDMI
- Audio return channel
- 4k x 2k resolution support
- Gold connectors
- Cable length 2m

Cable length	Order code	1+
2m	**16-1318**	4.24

528402

TruConnect®

NLHDMI-HSV01 HDMI to VGA Converter

This converter switches an **HDMI digital signal into a VGA analogue signal** making it suitable for use with a VGA monitor. It is powered from the HDMI source so no external power supply is required.

- Installs in seconds with no need for drivers
- Built-in HDMI cable
- Input HDMI
- Output VGA
- Cable length 150mm
- Colour: black

This model does not have a port for additional power or audio.

Type	Order code	1+	10+
HDMI to VGA converter	**19-5019**	17.21	14.96

565782

StarTech.com
Hard-to-find made easy®

Ultra HD HDMI Cable - HDMI to HDMI - M/M

The StarTech.com range of high speed HDMI cables feature 2 x gold-plated HDMI male connectors and durable high quality construction for dependable connections between Blu-Ray players, HDTVs, DVD Players and more. These high quality HDMI cable support 1080p+ resolutions at up to 120Hz refresh rate, with life-like colour. To accommodate the demands of future high definition devices, such as increased resolutions and higher frame rates, these Ultra HD cables also support resolutions up to 4k x 2k. Available in lengths from 300mm to 15m.

Backed by the StarTech.com lifetime warranty.

- Supports Ultra HD resolutions up to 4k x 2k
- Gold-plated HDMI connectors
- High quality construction
- Cable jacket type: PVC - polyvinyl chloride
- Cable length: 300mm to 15m
- Colour: Black
- Connector A: HDMI (19 pin) male
- Connector B: HDMI (19 pin) male
- Connector style: Straight

Type	Order code	1+
10m	**19-9414**	36.70
1.5m	**19-9416**	9.34
15m	**19-9417**	59.85
1m	**19-9419**	9.45
2m	**19-9421**	9.22
0.3m	**19-9423**	8.12
3m	**19-9425**	13.05
0.5m	**19-9427**	8.65
5m	**19-9428**	23.10
7m	**19-9431**	33.60

562653

Audio Connectors

TruConnect®

Jack and Audio Leads
Common jack leads.
- Employing moulded construction

Type	Order code	1+	10+	50+	100+
3.5 Stereo plug/skt	**20-0030**	3.09	2.48	1.64	1.51
3.5 Stereo plug/plug	**20-0040**	2.03	1.66	1.30	
3.5 Stereo/bare wire	**20-0041**	1.86	1.58	1.18	0.961

67173

Sounders & Buzzers

≡RVFM

Uncased Piezo Transducer

An uncased miniature piezo transducer offering an ultra low profile.

- Ideal for use with speech and music modules as fitted to greetings cards and toys
- Connection is by means of 95mm flying leads

For technical specialication visit **www.rapidonline.com**

	MOQ 5 - In Multiples of 5		
Type	Order code	5+	50+	300+
Uncased piezo transducer	**35-0200**	0.732	0.538	0.465

35847

≡RVFM

Electronic Buzzers

A range of compact, low-cost electronic buzzers.

- Available with either flying leads (10cm long) or PCB mounting pins
- 3V, 6V or 12V operating versions
- Resonant frequency is 400Hz
- Black ABS case material

Suitable for education and hobbyist use only.

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+
3V Buzzer + lead	**35-3592**	1.87	1.48	1.29
3V PCB Mount buzzer	**35-3594**	1.77	1.42	1.21
6V Buzzer + lead	**35-3596**	1.96	1.57	1.32
6V PCB Mount buzzer	**35-3598**	1.87	1.48	1.29
12V Buzzer + lead	**35-3610**	2.24	1.84	1.61
12V PCB Mount buzzer	**35-3612**	1.70	1.40	

36772

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Education

05

Components & Accessories

≡**RVFM**

Low Profile Buzzers

These PCB mounting buzzers have a loud but pleasant 85dB tone and operate from a either 6 or 12V DC supply. They are only 7.5mm high when mounted on the PCB. They will work with supply voltages ranging from 3 to 8V DC or 8 to 15V DC depending which version is required. Supply polarity is marked on the bottom of the top of the housing as an aid to installation. The case is finished in black.

● The base of the device is potted to maximise protection against flux contamination
● Masking label is included over the sound emission hole to permit board cleaning
● Encapsulated in a low profile housing making them particularly suitable for inclusion in miniature electronics instrumentation
● Supplied with PCB pins for direct mounting to PCBs
● Small / low profile design
● Compact rich sound
● Pitch 7.6mm
● Application: cellular phones, pagers, communication equipment, computers, household appliances, security of electronic devices
● Dimensions 11.6 x 11.6 x 7.5mm

For technical specialication visit **www.rapidonline.com**

	Order code	1+	25+	100+	500+
6V	**35-0040**	1.47	1.08	0.90	0.74
12V	**35-0041**	1.47	1.08	0.90	0.74

83003

≡**RVFM**

Electronic Buzzers with 20cm Flying Leads

A range of rectangular electronic buzzers offering a high but rich sound.

● Supplied with 20cm flying leads
● 2mm fixing holes in base
● KPMB-2200L series
● Available with **6 and 12V operating voltages**

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+
6V	**35-3601**	1.84	1.45	1.30
12V	**35-3603**	1.70	1.38	1.21

71396

≡**RVFM**

Round Electronic Buzzers with 20cm Flying Leads

A range of round electronic buzzers offering a high but rich sound.

● Supplied with 20cm flying leads
● 2mm fixing holes in base
● **KPMB-2600L** series
● Available with **3, 6 and 12V** operating voltages

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+	500+
3V DC	**35-3587**	1.81	1.45	1.26	1.14
6V DC	**35-3588**	1.91	1.52	1.34	
12V DC	**35-3589**	2.22	1.89	1.60	

71394

Primetone
Miniature Loudspeakers

An economical miniature speaker for use in small portable equipment.

● Fitted with paper cone and ferrite magnets
● Solder connection tags
● Both types 66mm diameter 21mm deep
● Handling capacity 300mW
● **Primetone types 6608F (35-0130) and 6664F (35-0135)**

Type	Order code	1+	25+	100+
80 Mini speaker	35-0130	1.48	1.35	1.11
640 Mini speaker	**35-0135**	1.59	1.46	1.19

30207

VISATON
FR 10 HM Full Range Loudspeakers 10cm, 4 inch

10cm (4in.) full range speakers with tweeter cone and European standard baskets.

The speakers offer simple fitting in vehicles with cut-outs for 10cm speakers.

● Typical applications include vehicles, mobile homes, etc.
● Moisturised cone
● Metal basket
● Rated power: 20W
● Maximum power: 30W
● Frequency response: 95 to 22000Hz
● Available with 40 or 80 coils
● **Visaton FR 10 series**

Type	Order code	1+	10+	25+
4 0hm	**35-2965**	8.50	7.41	6.85
8 0hm	**35-2966**	8.47	7.40	6.85

567154

VISATON
FR 7 Round Full Range Speaker 4Ω

A compact size **round miniature speaker from Visaton**. Includes a balanced frequency response from 130Hz, high efficiency and very good high range response, making it suitable for machines and other equipment where space is at a premium. Typical applications include control speakers for electronic devices, narrow network column speakers, model construction and electronic musical instruments.

● Moisturised cone
● Metal basket
● Cutout: Ø 61mm
● Manufacturer's part **2015**

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	10+	25+
Round Speaker	**35-0567**	5.62	4.43	4.04

554242

TruConnect®

BNC Adaptors

A range of adaptors suited to interconnection of a wide range of BNC plugs and sockets with nominal impedance of 50Ω.

● Suited to many applications including networked computer systems
● Bright nickel plated bodies
● See **www.rapidonline.com** for a range of ready assembled Network Cables employing Thin Ethernet cable

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+
Socket to socket	**16-0125**	2.28	1.73	1.52
T-Socket/plug	**16-0120**	3.43	2.67	
T.Socket	**16-0122**	1.45		

63649

Pololu
Robotics & Electronics

2128 Breakout Board for A4988 Stepper Motor Driver

This stepper motor carrier is a breakout board designed for use with the **A4988** DMOS microstepping bipolar stepper motor driver. The increased performance from the 4-layer PCB improves thermal performance, allowing the driver to deliver 20% more current than previous carriers. The breakout board gives five different step resolutions: full-step, half-step, quarter-step, eighth-step, and sixteenth-step, and there is adjustable current limiting, over-current and over-temperature protection.

The board operates from 8 to 35V and can deliver up to 2A per coil with adequate thermal management. The driver carrier ships with all surface-mount components - including the A4988 driver IC - installed, and is packaged with 0.1in male header pins included but not soldered in.

This breakout board is just one of the many **Pololu accessories carried by Rapid**.

● Simple step and direction control interface
● Adjustable current control
● Intelligent chopping control
● Under voltage lockout
● Crossover current protection
● Short-to-ground and shorted-load protection
● Exposed solderable ground pad on bottom of PCB

Type	Order code	1+
Breakout board	**75-0626**	7.40

561662

PCB Interconnect

400229

BKL ELECTRONIC

Male Header Single Row 2.54mm Pitch Straight 3 to 50-pole

BKL Electronics single row male headers for vertical mounting as a cable connector, PCB connector strip or with option jumpers. For printed circuit boards, flat cable connectors, etc.The insulation is notched between each pin making it easy to cut the strips into intermediate lengths. Available in 1 x 3 up to 1 x 50 pin configurations with 2.54mm pitch and a choice of 5.8 or 6.8mm long pins.

- Single row male header
- 1 x 3 up to 1 x 50
- 5.8 or 6.8mm pin length
- Grid pitch: 2.54mm
- Gold-plated
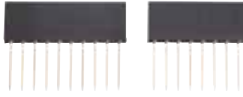- Max. contact resistance 20mΩ
- Nominal current 3A

			MOQ 10	
Type		Order code	10+	50+
3-pole	6.8mm pins	54-5064	0.152	0.138
5-pole	6.8mm pins	54-5065	0.156	0.141
8-pole	6.8mm pins	54-5066	0.229	0.20
20-pole	6.8mm pins	54-5068	0.576	0.504
40-pole	6.8mm pins	54-5070	0.895	0.782
8-pole	5.8mm pins	54-5074	0.122	0.112
10-pole	5.8mm pins	54-5075	0.163	0.147
20-pole	5.8mm pins	54-5076	0.286	0.249
40-pole	5.8mm pins	54-5078	0.54	0.471

537370

TruConnect®

2.54mm Pitch Single Row Long Pin Female Headers

These TruConnect **Long Pin Headers** with 2.54mm pitch have gold-plated brass contacts for PCB connection. They are available with either 6, 8 or 10 pins in a single row. The longer pins means these headers can be used with more than one PCB at the same time.

- Pin length 10.9mm
- Terminal height 8.5mm
- Straight terminals
- Current rating 3A max.
- Contact resistance ≤20mO
- Operating temperature -55 to +105°C

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	50+	100+	250+
6-way	19-0272	0.501	0.426	0.372	0.336
8-way	19-0273	0.746	0.637	0.546	0.517
10-way	19-0274	0.853	0.742	0.64	

531253

fischer elektronik ▶≡

Female Header Low Profile Fork Contact 2.54mm Pitch Square 0.635mm Pins

- Content 1pc
- Grid pitch 2.54 mm
- Insulation material PPS
- Pin Cross section square 0.635mm pins

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	50+
1x36 Vertical 2.54 Au	54-4555	3.24	2.81	
1x36 Vertical 2.54 Sn	54-4556	3.90	3.39	
2x36 Vertical 2.54 Au	54-4557	5.40	4.72	4.07
1x36 90° 2.54mm Sn	54-4560	3.12	2.71	

537300

Crocodile Leads & Clips

TruConnect®

4mm Stackable Plugs to Miniature Shrouded Crocodile Clips 50cm

A choice of red or black test leads that feature one end with a 4mm stackable banana plug and the other end with a miniature shrouded crocodile clip. Length of bale between the connectors is 50cm, making this lead suitable for a wide range of test and prototyping applications.

- Available in red or black
- 50cm PVC Lead with 0.75mm² wire
- 4mm banana plug to miniature shrouded croc clip
- Max. rating 15A 30V AC/60V DC

Type	Order code	1+	25+	100+
Red 50cm test lead	17-3279	2.51	2.20	1.73
Black 50cm test lead	17-3280	2.51	2.20	1.73

500247

BKL ELECTRONIC

Nickel-Plated Alligator Clips with Strong Springs

Nickel-plated alligator clips, with strong spring, connection by solder lug, with soft PVC insulation.

- Lengths 28, 35, 41mm
- 3A; 24V

			MOQ 5 - In Multiples of 5		
Colour	Length	Order code	5+	10+	50+	100+
Red	28mm	50-1336	0.434	0.401	0.387	0.355
Black	28mm	50-1337	0.48	0.443	0.413	0.38
Red	41mm	50-1338	0.633	0.581	0.527	
Black	41mm	50-1339	0.604	0.551	0.518	
Red	35mm	50-1340	0.493	0.447	0.429	
Black	35mm	50-1341	0.518	0.469	0.451	

520002

TruConnect®

Standard Crocodile Clip with 4mm Socket

A low cost uninsulated bright metal crocodile clip with a 4mm socket that will accept a 4mm banana plug. Wire can also be connected by means of the fitted screw or soldered into place.

- Low cost
- Accepts 4mm banana plugs
- Max. jaw opening 7mm
- Wire can be secured by screw or solder
- Material: cold rolled sheet steel
- Length: 51mm
- Rated current: 5A

		MOQ 10 - In Multiples of 10		
Type	Order code	10+	100+	500+	1000+
4mm socket croc clip	17-2876	0.131	0.117	0.106	0.10

567127

VOLTCRAFT®

Crocodile Clip Leads

The Volcraft Crocodile Leads KS-280/540/630 - lightning-fast build-up of so-called "flying" couplings and experimental designs. Featuring 10 leads, each with 2 insulated crocodile clips (2 x black, 2 x red, 2 x green, 2 x yellow, 2 x white).

- Perfect for test setup
- 10 leads with insulated crocodile clamps

For technical specialication visit **www.rapidonline.com**

Cable length	Cable x-section	Order code	1+
280mm	0.1mm²	51-5248	3.81
540mm	0.5mm²	51-5247	6.95
630mm	0.1mm²	51-5246	6.37

525247

Test Leads & Probes

TruConnect®

Ready Assembled BNC Test Leads

A range of ready assembled test leads employing bright nickel plated connectors complete with moulded-on strain reliefs, using RG-58 cable.

- Black PVC shield
- 50Ω impedance
- See **www.rapidonline.com** for a range of ready assembled Network Cables employing Thin Ethernet cable

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	10+	50+
BNC 4mm Plugs	16-0300	10.27	8.10	6.94
BNC Croc Clips	16-0315	6.78	5.29	4.48
BNC-BNC 1.2m	16-0330	5.53	4.11	3.49
BNC-BNC 2m	16-0340	9.50	7.05	5.90

63654

TruConnect®

4mm Stackable Plugs

These 4mm plugs have a 4mm socket in the rear providing an in-line stacking facility.

- The lead wire is clamped in position by a screw
- Nickel plated brass insert with stainless steel plug spring
- 30A rating
- Spare screws are available

For technical specialication visit **www.rapidonline.com**

		MOQ 2		
Type	Order code	2+	100+	500+
Black stackable plug	17-0400	1.04	0.777	0.67
Blue stackable plug	17-0405	0.961	0.696	0.589
Green stackable plug	17-0410	1.01	0.731	0.607
Red stackable plug	17-0420	1.26	0.911	0.755
White stackable plug	17-0425	0.961	0.696	0.589
Yellow stackable plug	17-0430	1.02	0.732	0.609

		Price each		
Type	Order code	1+	5+	10+
Spare screws (Pack of 25)	17-0398	1.67	1.32	1.14

63885

4mm Single Pole Connectors

TruConnect

4mm Binding Posts

These shrouded 4mm binding posts are ideal for panel mounting. They require a cut-out of 8.2mm and are terminated by means of twin nut fastening. Ideal for audio speaker connectors and other applications where robust high power connections are required. They have a 4mm end hole suitable for a wide variety of leads and probes terminals and a strong threaded insert for added reliability and to ensure a secure fixing.

- Body: Brass
- Spring: Nickel plated
- Insulation: ABS
- Mounting hole 8.2mm
- Contact: Twin nut fastening
- Length: 44mm
- Voltage: 30V AC - 60VDC
- Maximum current rating: 19A
- Available in **black, green and red**

	MOQ 5 - In Multiples of 5		
Type	Order code	5+	25+	100+
Black	**17-2696**	0.936	0.752	0.592
Green	**17-2697**	0.769	0.66	0.562
Red	**17-2698**	0.57	0.489	0.426

83061

TruConnect

Low Cost 4mm Plugs

Economically priced 4mm plugs.

- Can be used in conjunction with our 4mm terminals
- Solder connection
- Available in red, black and white

	MOQ 5 - In Multiples of 5		
Type	Order code	5+	100+	500+
4mm Red plug	**17-0130**	0.511	0.447	0.405
4mm Black plug	**17-0135**	0.552	0.47	0.418
4mm White plug	**17-0137**	0.41	0.338	

63883

TruConnect

4mm Sockets

These 4mm panel mounting sockets have tin plated brass inserts designed to accept a wide range of 4mm plugs.

- Sockets have double flat to assist positive location in panel
- Supplied with panel mounting hardware
- Rated 10A 125V AC
- Solder termination
- **SCI R1-22** series

	MOQ 5			
Type	Order code	5+	20+	100+	500+
Black 4mm socket	**17-1920**	0.532	0.414	0.352	0.306
Blue 4mm socket	**17-1925**	0.523	0.451	0.363	0.316
Green 4mm socket	**17-1930**	0.591	0.447	0.373	
Red 4mm socket	**17-1935**	0.515	0.462	0.382	0.34
White 4mm socket	**17-1940**	0.487	0.419	0.337	0.293
Yellow 4mm socket	**17-1945**	0.437	0.331	0.277	

63893

3mm LEDs

65611

TruOpto

Miniature 3mm LEDs

A range of industry standard 3mm round LEDs housed in a diffused coloured package.

- Viewing angle 60°
- Supplied in **packs of 100 or 1000**

For technical specialication visit **www.rapidonline.com**

Price per pack of 100				
Colour	Order code	1+	10+	25+
Red	**55-1770**	14.12	10.50	8.79
Bright red	**55-1776**	11.63	8.64	7.20
Yellow	**55-1774**	14.82	11.22	
Green	**55-1772**	14.71	10.68	9.07
Blue	**55-1762**	23.29	18.10	
White	**55-1766**	24.46	19.01	

Price per pack of 1000			
Colour	Order code	1+	5+
Red	**55-1778**	75.09	60.94
Bright red	**55-1784**	79.50	65.12
Yellow	**55-1782**	8.73	
Green	**55-1780**	106.82	83.76

64821

TruOpto

3mm White LEDs High Luminous Intensity

A range of white 3mm LEDs available in various luminous intensities and viewing angles.

Featuring high luminous intensities and long lifetime operation, these LEDs are suitable for a wide range of applications including: electronic sign and signals, small area illumination, back lighting and other lighting.

- 3mm Round standard directivity
- High luminous intensity
- Long lifetime operation
- Superior weather resistance
- UV Resistant epoxy
- Water clear lens

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Lum.Int. (mcd)	Order code	5+	25+	100+	500+
3mm White LED	1120	**55-1541**	0.835	0.594	0.387	0.19
3mm White LED	4200	**55-1545**	0.972	0.725	0.49	0.302
3mm White LED	10,000	**55-1549**	0.924	0.69	0.466	0.288

36655

5mm LEDs

65612

TruOpto

Rainbow Colour Cycling 5mm LED

Innovative, eye catching colour change LEDs. The 5mm LED contains an inbuilt IC that causes the LED to cycle through the red, green and blue elements, individually and then in combination. Colour cycles in 33s.

- Water clear or diffused lens types
- Ideal for use in warning devices, indication panels, alarm systems, mood lighting, toys

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Lens type	Order code	5+	100+	500+	1000+
Rainbow LED	Clear	**55-1904**	1.25	0.897	0.568	
Rainbow LED	Diffused	**55-1906**	1.25	0.897	0.568	0.487

75160

Nichia
LEDs Super Bright

Nichia is proud to reveal the bright light of these versatile and universal white 3mm and 5mm LEDs, with luminous intensity ranging from 1800mcd to 22000mcd.

For technical specialication visit **www.rapidonline.com**

		MOQ 5			
Type		Order code	5+	100+	500+	1000+
3mm	6800mcd	**50-0692**	0.682	0.577	0.499	0.425
3mm	15000mcd	**50-0691**	0.75	0.568	0.477	0.406
		Price each			
Type		Order code	1+	100+	500+	
5mm	1800mcd	**50-0697**	0.726	0.641	0.562	
		MOQ 5			
Type		Order code	5+	100+	500+	1000+
5mm	2300mcd	**50-0695**	0.753	0.568	0.477	0.406
5mm	7100mcd	**50-0694**	0.682	0.544	0.471	
5mm	22000mcd	**50-0698**	0.609	0.517	0.436	0.393
5mm	22000mcd	**50-0700**	0.785	0.634	0.528	

519861

TruOpto

High Intensity LEDs

A range of high intensity LEDs in a 5mm package that features a blade cathode which acts as a heat sink to dissipate heat at high current levels.

- High luminous intensity for use in a wide range of indication and illumination applications requiring a high output
- Manufactured using the latest technologies for long life, energy efficiency and high reliability
- Suitable for PCB and panel mounting applications
- Water clear lens

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Colour	Order code	5+	100+	500+	1000+
5mm LED	White	**55-2484**	0.939	0.684	0.541	0.462
5mm LED	Warm white	**55-2600**	1.17	0.682	0.566	
5mm LED	Red	**55-2476**	0.439	0.356	0.301	0.231
5mm LED	Orange	**55-2486**	0.524	0.338	0.293	0.23
5mm LED	Yellow	**55-2478**	0.451	0.367	0.308	0.237
5mm LED	Green	**55-2480**	0.596	0.395	0.336	0.313
5mm LED	Cyan	**55-2488**	0.625	0.415	0.336	
5mm LED	Blue	**55-2482**	0.626	0.415	0.347	0.323

73421

TruOpto

5mm RGB Colour Changing LEDs 60s Cycle 30B0 4.5V

These full colour RGB LEDs are 5mm round standard directivity lamps that have a 60s colour changing cycle. Ideal for applications such as toys, games, audio equipment, decorative lighting, etc.

- Available with a white diffused or water clear lens
- High luminosity
- Superior weather resistance

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	100+	500+
LED Diffused	**55-9206**	0.628	0.519	0.44
LED Water clear	**55-9207**	0.628	0.519	0.44

560986

Tru✸Opto

5mm Flashing LEDs

A range of high brightness 5mm LEDs in a water clear package. Each LED contains an IC that produces a continuous blink at a frequency of 1.5Hz (1.8Hz for **55-1210**).

- Superior weather resistance
- Suitable for warning devices, alarms, indicators, etc.

For technical specialication visit **www.rapidonline.com**

			MOQ 5 - In Multiples of 5		
Type	Colour	Order code	5+	100+	500+	1000+
Flashing LED	Red	**55-1892**	0.515	0.244	0.221	
Flashing LED	Yellow	**55-1894**	0.504	0.239	0.29	
Flashing LED	Green	**55-1896**	0.491	0.239	0.219	
Flashing LED	Blue	**55-1898**	0.516	0.251	0.226	0.204
Flashing LED	White	**55-1891**	1.15	0.81	0.508	

76184

Tru✸Opto

5mm LED Warm White 1120mcd

An LED that has a warm white colour and a 5mm standard directivty design. Its very high luminosity and long lifetime operation makes it ideal for use in electronic signs and signals, small area illumination and back lighting.

- Luminosity 1120mcd
- Superior weather resistance
- UV Resistant epoxy
- Water clear lens
- Viewing angle 60°

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	100+	500+	1000+
5mm Warm white LED	**55-3000**	0.288	0.225	0.165	0.156

517653

Tru✸Opto

5mm White LEDs

LEDs that are available in high luminous intensities of up to 30,000mcd at 20mA and provide white LED technology at the cost of lower technology indicators. Suitable for a wide range of illumination and indication applications where high luminous intensity is required, such as: small area illumination, back lighting and general purpose indication.

- Housed in an industry standard 5mm water clear package
- Viewing angle 15°
- Superior weather resistance
- UV resistant epoxy
- Suitable alternative for filament lamps

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	100+	500+	1000+
LED 6000mcd	**55-1820**	1.19	0.851	0.586	
LED 10,000mcd	**55-1886**	0.757	0.475	0.37	0.327
LED 30,000mcd	**55-2216**	1.37	1.12	0.848	

64846

Tru✸Opto

5mm White LEDs High Luminosity

These 5mm high intensity white LEDs are available in a choice of luminous intensities and are suitable for a wide range of applications such as: electronic signs and signals, small area illumination, and back lighting.

- High luminosity
- 5mm Round standard directivity
- Long operational lifetime
- Superior weather resistance

- UV Resistant epoxy
- Housed in a water clear package

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	25+	100+	500+
5mm White LED 5800mcd	**55-1543**	0.972	0.725	0.49	0.302
5mm White LED 1560mcd	**55-1547**	0.971	0.725	0.49	0.302

36657

Tru✸Opto

Standard 5mm LED

A range of industry standard 5mm diameter LEDs housed in a coloured diffused lens package.

- Suitable for PCB or panel mounting applications
- Viewing angle 60°
- Cathode is shorter lead
- Supplied in **packs of 100 or 1000**

For technical specialication visit **www.rapidonline.com**

	Price per pack of 100		
Type	Order code	1+	10+	25+
Red	**55-1790**	8.88	7.97	6.79
Bright red	**55-1796**	11.07	8.54	
Yellow	**55-1794**	15.45	11.68	
Green	**55-1792**	15.00	11.34	9.73
Blue	**55-1754**	24.41	19.14	
White	**55-1758**	23.78	18.69	

	Price per pack of 1000	
Type	Order code	1+	5+
Red	**55-1798**	93.05	69.71
Bright red	**55-1804**	90.87	74.43
Yellow	**55-1802**	104.32	83.76
Green	**55-1800**	91.81	75.20
Blue	**55-1756**	33.73	

61374

Tru✸Opto

Full Colour 5mm LED 60B0

Versatile full-colour RGB LEDs from **TruOpto** that are suitable for a very wide range of applications. These LED lamps can be used in products such as toys, electronic games, AV equipment, indicator panels, decorative lighting. These solid state LED lights also feature high luminous intensity and a common anode configuration. These LEDs can produce red, green, blue and white light, making them a versatile addition to any project.

- Full colour LED
- Available in water clear or diffused lens types
- Common anode type
- 5mm Round standard directivity
- Excellent weather resistance
- Wide 60° viewing angle

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	25+	100+
LED Water clear lens	**72-9643**	1.61	1.31	1.06
LED Diffused lens	**72-9647**	1.61	1.31	1.06

500653

Tru✸Opto

5mm High Brightness 15B0 LEDs

A range of 5mm high intensity LEDs that are suitable for a wide variety of illumination and indication applications such as: small area illumination, back lighting, general purpose indication.

- Housed in an industry standard 5mm water clear package

- Available in several colours including pink and violet
- Viewing angle 15°
- Superior weather resistance
- UV resistant epoxy
- Suitable alternative for filament lamps

For technical specialication visit **www.rapidonline.com**

			MOQ 5 - In Multiples of 5		
Type	Colour	Order code	5+	100+	500+	1000+
5mm LED (14cd)	Red	**55-1806**	0.296	0.244	0.171	0.129
5mm LED (35cd)	Red	**55-1807**	0.402	0.304	0.215	
5mm LED	Orange	**55-1808**	0.248	0.178	0.146	0.099
5mm LED	Yellow	**55-1814**	0.261	0.187	0.151	
5mm LED	Green	**55-1816**	0.596	0.478	0.353	
5mm LED	Blue	**55-1810**	0.924	0.772	0.64	
5mm LED	Violet	**55-1818**	0.516	0.413	0.281	
5mm LED	Pink	**55-1822**	0.423	0.343	0.263	

81462

Tru✸Opto

5mm Oval High Power LEDs

These 5mm high power, oval LEDs from **TruOpto** feature a directivity pattern that is ideally suited to applications such as: traffic signals and portable light sources, signage and channel lettering, decorating and entertainment lighting, architectural lighting, small area illumination and back lighting.

- High power suitable for many applications
- 5.1 x 4.3mm lens
- Superior weather resistance
- UV Resistant epoxy

For technical specialication visit **www.rapidonline.com**

			MOQ 5 - In Multiples of 5		
Colour	Lens	Order code	5+	100+	500+	1000+
Red	Diffused	**55-2190**	0.451	0.327	0.263	
Yellow	Diffused	**55-2191**	0.429	0.311	0.255	
Green	Diffused	**55-2192**	0.431	0.313	0.256	0.195
Blue	Diffused	**55-2193**	0.491	0.355	0.286	
White	Diffused	**55-2194**	0.705	0.537	0.427	
White	Water clear	**55-2195**	0.482	0.354	0.265	

82709

10mm LEDs

65614

Tru✸Opto

Rainbow Colour Cycling 10mm LED

Innovative, eye catching colour change 10mm LED. Contains an inbuilt IC that causes the LED to cycle through the red, green and blue elements, individually and then in combination. Colours complete a cycle every 33 seconds. Ideal for use in audio systems, warning devices, indication panels, alarm systems, mood lighting, toys and games.

- Water clear lens
- High luminosity
- Superior weather resistance

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	100+	500+
LED 10mm rainbow clear	**55-0780**	1.46	1.29	0.766

123540

STEAM resources

Don't forget to visit our STEAM Lab online

www.rapidonline.com/steam-lab

Education

05

Components & Accessories

Tru⚡Opto

Premium 10mm White LED Through-Hole

A through-hole LED with a 10mm lens and pure white colour. A high luminous output and long life make this large LED suitable for portable lighting, interior and exterior automotive lighting, illuminated advertising, and general lighting.

- T-3 10mm Standard directivity
- Water clear lens
- Superior weather resistance
- UV Resistant epoxy
- Operating temperature –30°C to +85°C

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	100+	500+
10mm Pure white LED	**55-2879**	0.486	0.40	0.352

532062

Tru⚡Opto

10mm White Diffused LED 10,000mcd 3.1V 30B0

This 10mm White Diffused LED 10,000mcd 3.1V 30° from **TruOpto** is a high luminous LED which is ideal for electronic signs and signals, small area illuminations and back lighting. Equipped with a host of excellent features such as the superior weather resistance, long lifetime operation and UV resistant epoxy.

- White diffused type
- High luminous intensity
- 10mm round standard directivity

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	10+	100+	500+
White diffused LED	**55-2885**	0.232	0.201	0.171	0.165

533023

LED Displays

65619

Tru⚡Opto

14.2mm Single Digit Displays

A range of seven segment LED displays that are 14.2mm (0.56in high) and available in red, high output red, yellow, yellow green, pure green, blue and white.

- Available in common anode or common cathode configurations
- Right hand decimal point
- Long lifetime operation
- IC Compatible
- Low power dissipation

For technical specialication visit **www.rapidonline.com**
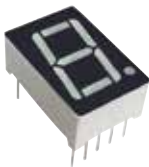
		MOQ 5 - In Multiples of 5			
Colour	Order code	5+	25+	100+	500=
Common anode					
Red (20mcd)	**57-0126**	0.875	0.71	0.478	
Red (100mcd)	**57-0128**	0.716	0.58	0.39	0.324
Yellow	**57-0136**	0.681	0.552	0.378	
Blue	**57-0138**	1.57	1.36	1.11	
White	**57-0143**	1.43	1.19	0.982	
Colour	Order code	5+	25+	100+	
Common cathode					
Red (20mcd)	**57-0121**	1.22	1.05	0.863	
Red (100mcd)	**57-0123**	0.886	0.705	0.473	
Yellow	**57-0133**	0.681	0.552	0.453	0.386
Pure green	**57-0131**	1.24	1.05	0.881	
Blue	**57-0137**	1.24	1.05	0.88	
White	**57-0141**	1.58	1.30	1.12	

200089

Light Dependent Resistors

Tru⚡Opto

Miniature Light Dependent Resistor

A compact low cost cadmium sulphide light dependent resistor (LDR) housed in a small package.

- 5mm diameter
- Clear epoxy finish
- Resistance reduces as the light falling on the device increases
- Note: This product contains cadmium sulphide, the use of which is restricted by the RoHS directive

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	1000+
Miniature LDR	**58-0134**	1.10	0.865	0.618	0.535

34796

Tru⚡Opto

12mm Light Dependent Resistor Non-RoHS

A CdS (Cadmium Sulphide) light dependent resistor (LDR) that is housed in a small package. Typical applications for this device include: camera automatic photometry, photelectric control, annunciator, light control switch, industrial control, and electronic toys.

- Resistance reduces as the light falling on the device increases
- Small volume
- Clear epoxy finish
- Fast response
- High sensitivity
- Very reliable
- Note: This product contains cadmium sulphide, the use of which is restricted by the RoHS directive
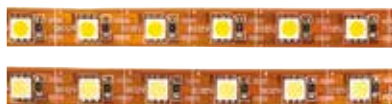
For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	100+	500+
LDR Non-RoHS	**58-0135**	2.39	2.15	1.90

82713

LED Strips & Modules

Tru⚡Opto

Cuttable Light Strips 12V 1m 60x LEDs

These 1m LED strips contain 60x super high brightness LEDs on a flexible PCB with self-adhesive backing. The strips can be cut in to individual pieces or to other lengths as required. The LEDs operate directly from 12V DC and have low power consumption and high intensity, making them suitable for applications such as channel letter signs, indirect accent decor lights, large area backlighting, under counter lighting, contour lighting, etc.

- Available in white or warm white
- Individual piece are 16.67mm
- Supplied with 300mm wire for connection
- Long life
- Excellent beam control
- Energy saving
- 5mm SMD LEDs

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	5+	10+
LED Strip white	**76-0015**	14.93	13.57	12.14
LED Strip warm white	**76-0016**	14.93	13.57	

558687

Tru⚡Opto

Flexible LED Strips 30-way

A range of separable LED strips on a flexible printed circuit board. The whole strip contains 30 LEDs and associated circuitry, and the strips are available in a spectrum of colours. Each strip can be separated in to 10 x 3 LEDs pieces and are adhesive backed.

The versatility and operating performance of these LEDs make them ideally suited to a wide range of applications including: channel letter signs, indirect accent decor light, large area back lighting, under counter lighting, building contour delineation, substitution for neon lighting and signage.

- Simple to use, just connect to suitable voltage
- Self-adhesive backing can be fixed almost anywhere
- High intensity output with low power consumption
- Energy saving
- Excellent beam control
- Long life
- Each LED has 120° viewing angle for even light distribution

For technical specialication visit **www.rapidonline.com**

Colour	Order code	1+	10+	25+
White	**56-0480**	20.06	18.05	14.57
Warm white	**56-0478**	14.91	13.48	12.66

81568

White Label

Self Adhesive LED Lighting Tape Reels, 12VDC

If you want to create your own stylish lighting display this value-for-money LED tape can help you make your project a reality. Simply peel off the tape's protective backing and stick it anywhere you need LED lighting - on walls, ceilings, floors or integrated in furniture.
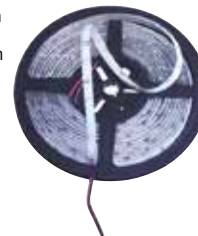
These reels contain 5m of self-adhesive LED lighting tape with 150 LEDs at intervals of 33mm. The tape can be cut with scissors into shorter segments, so you can use it for separate lighting in multiple locations. Each LED is fully encapsulated and so protected against physical damage and moisture. Tapes available with a choice of LED colours.

- Lead cable 20cm, open end - adhesive tape on rear side
- Shortest possible unit (100mm) with 3 LEDs, can be separated at the marked intervals
- Can be cut into 50 separate units
- Soldering joints every 100mm
- Requires 12V power supply

For technical specialication visit **www.rapidonline.com**

LED colour	Order code	1+	5+	10+
Super warm white	**51-0208**	53.51	48.65	
Cold white	**51-0209**	47.78	43.42	
Green	**51-0211**	37.68	34.25	
Amber	**51-0212**	38.19	34.71	30.77

521388

Power LEDs

TruOpto

1W High Luminosity Power LED Stars

These power star LEDs are high luminosity modules that are mounted on an PCB substrate. Being more energy efficient than incandescent and most halogen lamps and available in a range of colours, including white and warm white, these LEDs are ideal for a wide range of applications including: electronic signs and signals, small area illumination, back lighting and other lighting, bollards, security and garden uses, traffic signalling and beacons.

- High luminous flux
- Super energy efficiency
- Long operational life
- Superior ESD protection
- Superior UV resistance

For technical specialisation visit **www.rapidonline.com**

Colour	Order code	1+	25+	100+	250+
Red	**55-2243**	3.49	3.19	2.72	2.42
Blue	**55-2247**	3.67	3.35	2.81	
White	**55-2239**	3.56	3.26	2.71	2.43

200093

TruOpto

1W High Luminous Flux Power LEDs

A range of 1W LEDs that feature high luminous flux with super energy efficient operation.

Suitable applications for these LEDs include: reading lights, portable lighting, security/bollard/garden, traffic signalling and beacons, signage, etc.

- Silicon lenses
- High luminous flux
- Super energy efficiency
- Long lifetime operation
- Superior ESD protection
- Superior UV resistance
- Beam angle 120°

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	25+	100+
High flux red	**55-1867**	3.08	2.65	2.23
White 80lm	**55-1873**	2.63	2.29	1.77

200100

LED Mounts & Holders

TruOpto

Solderless LED Holders

Novel LED connectors, with 200mm pre-stripped and tinned leads.

The connectors simply clip to the rear of a panel- mounted LED and are retained in position by a patented clamping device.

- Suitable for use with all LEDs with leads on a 2.54mm pitch
- Significantly reduces panel assembly time
- Dimensions 14.5 x 2.6mm
- Moulded in Toray
- UL 94V-0 rating

		MOQ 5 - In Multiples of 5			
Cable size	Order code	5+	25+	100+	1000+
26 AWG	**55-0167**	0.835	0.691	0.592	0.553
22 AWG	**55-9290**	0.87	0.74	0.604	0.578

29296

Miniature Lamps

77821

Barthelme

E10 Globe lamps

A range of E10 base, spherically-bulbed lamps available in a range of voltages and current ratings. There are lamps suitable for torches (including coloured lamps), bicycle lamps and for general purpose use.

- Clear lens
- Dimensions 11.5 x 24mm

For technical specialisation visit **www.rapidonline.com**

			MOQ 5 - In Multiples of 5		
Rating	Usage	Order code	5+	25+	50+
1.2V 150mA	Torch	**57-6536**	0.275	0.258	0.238
1.5V 200mA	Torch	**57-6524**	0.301	0.275	0.257
2.2V 200mA	Torch	**57-6537**	0.22	0.207	0.192
2.5V 100mA	Torch	**57-6538**	0.204	0.192	0.183
2.5V 200mA	Torch	**57-6525**	0.301	0.275	0.257
2.5V 300mA	Torch	**57-6528**	0.301	0.275	0.257
3.5V 200mA	Torch	**57-6529**	0.301	0.275	0.257
3.5V 200mA	Red torch	**57-6530**	0.46	0.432	0.396
3.5V 200mA	Yel. torch	**57-6531**	0.372	0.349	0.336
3.5V 200mA	Green torch	**57-6532**	0.597	0.561	0.514
3.5V 200mA	Blue torch	**57-6533**	0.374	0.349	
3.8V 70mA	Torch	**57-6534**	0.275	0.258	0.238
3.8V 300mA	Torch	**57-6535**	0.275	0.258	0.238
4.5V 100mA	Torch	**57-6526**	0.301	0.275	0.257
4.8V 300mA	Torch	**57-6527**	0.255	0.24	0.228
6.2V 300mA	Bicycle	**57-6539**	0.344	0.324	0.298
8V 50mA	Bicycle	**57-6540**	0.191	0.18	
14V 200mA	Bicycle	**57-6541**	0.27	0.248	
6V 0.3W	GP	**57-6542**	0.344	0.317	0.297
6V 2W	GP	**57-6543**	0.274	0.252	0.237
6V 3W	GP	**57-6544**	0.344	0.317	0.297
12V 3W	GP	**57-6545**	0.344	0.317	0.297
24V 1.2W	GP	**57-6546**	0.263	0.241	
24V 3W	GP	**57-6547**	0.263	0.241	

545893

Capacitors

Velleman

Ceramic Capacitor Kit

The Velleman 224-Piece Ceramic Capacitor Kit is a high quality ceramic capacitor with a total of 14 values from 10pF to 220nF.

- A total of 14 values (from 10pF to 220nF)
- 50V Rating

Kit contains:
21x   10pF, 100pF, 1nF, 10nF, 100nF
14x   22pF, 47pF, 220pF, 470pF, 2.2nF, 4.7nF, 22nF, 47nF
7x   220nF

Type	Order code	1+
224-piece kit	**13-0206**	11.68

74260

Velleman

120-piece Electrolytic Capacitor Kit

This kit contains a range of high-quality electrolytic capacitors.

- A total of 10 values (from 1µF to 1000µF)

Kit contains:
15x   1µF, 2.2µF, 4.7µF, 10µF and 22µF (50V); 47µF and 100µF (25V)
5x   220µF, 470µF, 1000µF (25V)

Type	Order code	1+
120-piece elec. cap. kit	**13-0221**	10.50

74261

Resistors

TruOhm

CR25 Carbon Film Resistor Kit

CR25 TruOhm CR25 series carbon film resistor kit containing 1000 pieces supplied in 8 packs containing 0.25W 5% Carbon Film Resistors.

These range from 4.7R to 10M, equalling a total of 63 different values throughout the resistor range provided.

- Values ranging from 4.7Ω through to 10MΩ
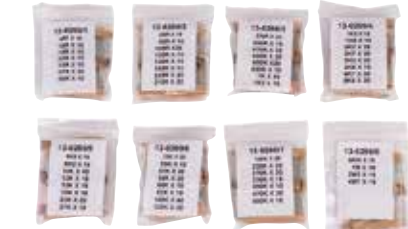- A total of 63 different values
- Supplied in **8 packs**

Kit Contents:

10 x 4R7	10 x 150R	15 x 1K2	30 x 10K	15 x 68K	25 x 470K
10 x 10R	15 x 180R	15 x 1K5	15 x 12K	10 x 82K	10 x 560K
10 x 15R	20 x 220R	10 x 1K8	15 x 15K	30 x 100K	10 x 680K
10 x 22R	20 x 270R	25 x 2K2	15 x 18K	20 x 120K	5 x 820K
10 x 33R	20 x 330R	20 x 2K7	20 x 22K	15 x 150K	20 x 1M
20 x 47R	10 x 390R	20 x 3K3	15 x 27K	15 x 180K	10 x 2M2
10 x 56R	30 x 470R	15 x 3K9	20 x 33K	20 x 220K	5 x 3M3
10 x 68R	20 x 560R	25 x 4K7	10 x 39K	15 x 270K	10 x 4M7
10 x 82R	20 x 680R	20 x 5K6	30 x 47K	15 x 330K	5 x 6M8
20 x 100R	10 x 820R	15 x 6K8	20 x 56K	10 x 390K	20 x 10M
10 x 120R	30 x 1K	10 x 8K2			

Type	Order code	1+	5+
CR25 0.25W Resistor kit	**13-0200**	22.79	19.18

28374

TruOhm

CR50 Carbon Film Resistor Kit

A pack containing a total of 1000 0.5W 5% carbon film resistors.

- A total of 58 different values

Kit contents:

10 x 4R7	10 x 120R	10 x 820R	20 x 5K6	10 x 39K	15 x 330K
15 x 10R	10 x 150R	30 x 1K	15 x 6K8	30 x 47K	10 x 390K
10 x 15R	10 x 180R	15 x 1K2	10 x 8K2	20 x 56K	25 x 470K
10 x 22R	20 x 220R	15 x 1K5	40 x 10K	15 x 68K	10 x 560K
10 x 33R	20 x 270R	10 x 1K8	15 x 12K	10 x 82K	10 x 680K
20 x 47R	20 x 330R	25 x 2K2	15 x 15K	40 x 100K	25 x 1M
10 x 56R	10 x 390R	20 x 2K7	15 x 18K	20 x 120K	10 x 2M2
10 x 68R	30 x 470R	20 x 3K3	20 x 22K	15 x 150K	15 x 4M7
10 x 82R	20 x 560R	15 x 3K9	15 x 27K	20 x 220K	
20 x 100R	20 x 680R	30 x 4K7	20 x 33K	15 x 270K	

Type	Order code	1+	5+
CR50 0.5W Resistor kit	**13-0260**	17.10	14.33

65195

Order online

Save time, and place your order at:

www.rapidonline.com

24 hours a day

velleman

E12 Series 610-Piece Carbon Film Resistor Kit

A kit of high-quality carbon film resistors in the popular E12 series of preferred values.

● Axial leaded
● 61 values with 10 pieces per value

For technical specialication visit
www.rapidonline.com

Type	Order code	1+
E12 610 Pcs carbon res. kit	**13-0201**	8.28

74262

Preset Potentiometers

65673

TruΩhm

Carbon Preset Potentiometers

Miniature single turn carbon track preset potentiometers.

● Horizontal mounting
● Linear law
● 30% tolerance
● 0.1W rated

For technical specialication visit
www.rapidonline.com

	MOQ 5 - In Multiples of 5			
Value (Ω)	Order code	5+	100+	500+	1000+
100R	**67-0400**	0.122	0.097	0.066	
220R	**67-0402**	0.0221			
470R	**67-0404**	0.122	0.097	0.066	
1K	**67-0406**	0.147	0.116	0.076	
2K2	**67-0408**	0.196	0.152	0.114	
4K7	**67-0410**	0.155	0.122	0.079	0.072
10K	**67-0412**	0.147	0.116	0.076	0.069
22K	**67-0414**	0.155	0.122	0.079	
47K	**67-0416**	0.186	0.144	0.11	0.087
100K	**67-0418**	0.155	0.122	0.079	0.072
200K	**67-0420**	0.0228			
500K	**67-0422**	0.122	0.097	0.066	0.059
1M	**67-0424**	0.155	0.122	0.079	0.072

60265

Discrete Semiconductors

Selected brands
Darlington NPN Transistors

NPN Darlington transistors.

For technical specialication visit
www.rapidonline.com

	MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
TMPSA13 (CDIL)	**81-0143**	0.299	0.276	0.231	0.214
BCX38C (ZETEX)	**81-0004**	0.649	0.501	0.432	0.387
BD679	**81-0106**	0.453	0.422	0.354	
TIP120 (ST)	**81-0168**	0.924	0.857	0.545	0.416
TIP121 (ST)	**38-2027**	0.52	0.374	0.309	
TIP122 (ST)	**81-0186**	0.81	0.729	0.53	
TIP126	**81-0179**	0.541	0.486	0.309	0.255
BDX33C	**81-0428**	0.931	0.648	0.577	
TIP142 (ST)	**81-0190**	2.15	2.00	1.19	
BDW93C	**81-0110**	0.596	0.541	0.476	
ZTX614	**81-0376**	0.393	0.354	0.263	
ZTX605	**81-0220**	0.86	0.785	0.645	0.52

66250

Selected brands
Low Power NPN Transistors

Low power, small signal, general purpose and RF, NPN transistors.

● Low power NPN transistors

For technical specialication visit
www.rapidonline.com

	MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
2N2222A	**81-0256**	0.492	0.458	0.40	0.323
2N3053	**81-0264**	0.52	0.446	0.403	0.36
BC107	**81-0010**	0.43	0.353	0.308	0.28
BC108	**81-0014**	0.35	0.286	0.281	0.272
BC108B (CDIL)	**81-0016**	0.516	0.369	0.342	
BC108C	**81-0018**	0.405	0.355	0.332	0.318
BC109	**81-0020**	1.19	0.828	0.639	0.52
BC548C (ONS)	**50-0297**	0.195	0.165	0.118	

	MOQ 20 - In Multiples of 10			
Type	Order code	20+	60+	100+	500+
2N3704	**81-0272**	0.129	0.099	0.082	0.056
2N3705	**81-0274**	0.111	0.096	0.06	0.056
2N3904 (TRU)	**81-0484**	0.182	0.121	0.079	0.065
2N4401 (CDIL)	**81-0487**	0.059	0.049	0.041	0.033
2N4401 (TRU)	**81-0486**	0.189	0.149	0.088	0.047
BC107B	**81-0012**	0.314	0.291	0.252	
Type	Order code	20+	50+	100+	500+
BC182L	**81-0034**	0.172	0.139	0.073	0.057
Type	Order code	20+	60+	100+	500+
BC183L	**81-0036**	0.142	0.112	0.06	0.047
BC184	**81-0038**	0.124	0.09	0.05	0.033
BC184L	**81-0040**	0.139	0.102	0.06	0.044
Type	Order code	20+	50+	100+	500+
BC238B	**81-0034**	0.204	0.139	0.061	0.047
	81-0472	0.108	0.071	0.047	0.039
BC337-16 (Diotec)	**81-0395**	0.088	0.047	0.0278	0.0254
Type	Order code	20+	60+	100+	500+
BC337-25 (Diotec)	**81-0397**	0.096	0.051	0.0289	0.0264
BC547 (CDIL)	**81-0469**	0.08	0.043	0.0287	0.027
BC547B (TRU)	**81-0468**	0.123	0.069	0.046	0.039
BC548B (CDIL)	**81-0066**	0.089	0.055	0.039	0.034
BC548B (TRU)	**81-0466**	0.135	0.107	0.063	0.042
Type	Order code	20+	50+	100+	500+
BC549B (TRU)	**81-0068**	0.07	0.055	0.034	0.0214
BC549C (TRU)	**81-0441**	0.034			
Type	Order code	20+	60+	100+	500+
MPSA42	**81-0144**	0.117	0.079	0.071	
P2N2222A (ONS)	**81-0257**	0.132	0.101	0.087	0.073

66245

Selected brands
Medium Power NPN Transistors

Medium power, NPN transistors.

For technical specialication visit
www.rapidonline.com

|	Price each			
Type	Order code	1+	25+	100+	500+
BFY52	**81-0124**	0.37	0.30	0.25	0.22
	MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
ZTX689B	**81-0228**	0.797	0.651	0.497	0.454
BFY51	**81-0122**	0.618	0.382	0.34	0.299
	MOQ 2000			
Type	Order code	2000+			
BFY50	**81-0120**	0.314			
	MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
ZTX450	**81-0202**	0.761	0.55	0.402	0.307
ZTX451	**81-0204**	0.496	0.461	0.283	
BFX85	**81-0116**	0.752	0.674	0.57	0.494
ZTX651	**81-0224**	0.90	0.696	0.451	0.421
BC639	**81-0080**	0.205	0.162	0.115	0.084
	Price each			
Type	Order code	1+	10+	100+	
ZTX453	**81-0225**	0.56	0.435	0.28	

66248

Selected brands
High Voltage SCRs

A range of high voltage SCRs in TO-220 and TO-126 packages. Acting as a 'switched diode', when a one-off voltage is applied to the gate, the diode conducts. It will continue to conduct until the current between the anode and cathode is reduced.

● TO-220 and TO-126 plastic packages
● High current rating
● High current and voltage control for applications such as lighting and heating
● Supplied in **small quantities**

For technical specialication visit **www.rapidonline.com**
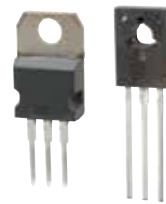
	MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
C106D	**47-3270**	0.783	0.642	0.563	0.524
C106M1G	**47-3388**	0.699	0.57	0.468	0.439
CDR05	**47-3273**	0.443	0.39	0.352	
BT151-800R	**47-3204**	0.968	0.778	0.613	
2N6509G	**47-3386**	1.28	1.10	0.957	

66240

Integrated Circuits

4tronix

L298N Dual H-Bridge Motor Driver Module

A dual H-bridge motor driver board module that is ideal for driving the **Initio** robot platform, even fitting the mounting points.

Based around the **ST L298N** dual full-bridge driver, this module has all the features and performance that you need for powering your devices.

● 46V Max input voltage
● 3A Peak output current (each channel)
● 2A DC max output current (each channel)
● Parallel the two outputs to get higher currents
● Separate LEDs for each direction and for each channel
● Power LED
● Power switch get everything working before powering the motors
● On board 5V regulator with separate output for powering other devices

Type	Order code	1+
Motor driver module	**75-5013**	7.54

568082

ST

1A Fixed Voltage Insulated TO-220FP Voltage Regulators

An insulated range of the standard 78 series voltage regulator. Supplied in a TO-220FP fully moulded package.

● Can be mounted directly to a heatsink
● Protected by internal current limiting and thermal shut-down

		MOQ 5 - In Multiples of 5			
Mftrs. pt. no.	Voltage	Order code	5+	25+	100+	500+
L7805CP	+5V	**47-3550**	0.596	0.53	0.48	0.461
L7812CP	+12V	**47-3552**	0.848	0.666	0.525	
L7815CP	+15V	**47-3554**	0.716	0.616	0.52	

60863

Microchip
PIC16F 8-bit CMOS Flash/EEPROM Microcontrollers

The PIC16F series fits perfectly in applications ranging from high-speed automotive and appliance control to low power remote sensors. Flash/EEPROM technology makes customisation of code extremely fast and convenient. Other features include:

- Mid-range architecture, 14-bit wide instructions
- 1 Million data memory EEPROM ERASE/WRITE cycles
- Direct LED drive
- 8-bit timer/counter with 8-bit programmable prescaler
- In circuit serial programming (ICSP) featured

For technical specialisation visit **www.rapidonline.com**

Type	Order code	MOQ 5 - In Multiples of 5		
		5+	25+	100+
PIC16F84A-04/P	**73-2634**	5.22	5.06	4.79
PIC16F648A-I/P	**73-2654**	2.39	2.26	2.20
PIC16F73-I/SP	**73-2400**	3.50	3.27	3.23
PIC16F616-I/P	**73-3684**	1.59	1.46	1.38
PIC16F616-I/SL	**73-3686**	1.90		
PIC16F630-I/P	**73-3688**	2.42	2.38	2.25
PIC16F676-I/P	**73-3692**	1.63	1.58	1.54
PIC16F684-I/SL	**73-3696**	1.82	2.02	1.91
PIC16F688-I/P	**73-3698**	2.53	2.12	2.12
PIC16F688-I/SL	**73-3700**	2.00	1.86	1.78
PIC16F690-I/P	**73-3702**	2.45	2.39	2.26

28690

TruSemi
LED Flashing Controller IC

The M34 is a low voltage single output LED flashing controller IC that can drive several LEDs simultaneously (max current 25mA). The IC has an in-built RC oscillator circuit, so requires minimum external components.

- M34-1 has a flash rate of 1Hz
- M34-2 has a flash rate of 2Hz
- The device is designed for a 3V DC supply
- Housed in a TO-92 package

Type	Order code	MOQ 5 - In Multiples of 5			
		5+	10+	25+	100+
M34-1	**82-0030**	0.725	0.605	0.483	0.366
M34-2	**82-0032**	0.563	0.45	0.38	0.278

34523

Reed Relays

65658

Meder
SIL Reed Relays

A range of single pole normally open diode protected reed relays, housed in a compact single in-line epoxy moulded package.

- Ultra-slim package permits relays to be mounted on 5.08mm centres
- Completely washable and suited to auto insertion
- Suitable for direct interfacing with TTL logic

For technical specialisation visit **www.rapidonline.com**

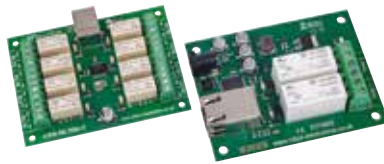| Type	Resistance	Order code	1+	25+	100+
5V Coil	5000	**60-0650**	3.23	3.09	2.45
12V Coil	10000	**60-0655**	3.00	2.84	2.65

65069

Relay Module Boards

Devantech
Multichannel Relay Module Boards

A range of 2- and 8-channel relay module boards that are available with several control types and current ratings. There are relay modules that can be controlled over the Ethernet using simple TCP/IP commands and for which there is a free Android app available to be able to control the relay module remotely. Several modules are controlled via USB for immediate control via computer and there is also a relay module board that has control via serial bus or I²C.

For further details of the boards please see the individual product pages.

- All relays Single Pole Changeover (SPCO) type
- LED Indication
- Operational temperature –40°C to +70°C
- Screw terminals
- For technical specialisation visit **www.rapidonline.com**

Type	Control	Order code	1+
8 Channel 16A	Ethernet	**60-5055**	57.63
2 Channel 16A	Ethernet	**60-5057**	52.74
8 Channel 2A	USB	**66-0338**	52.15
2 Channel 16A	USB	**60-5060**	29.28
8 Channel 16A	USB	**60-5062**	71.68
8 Chan. latching	USB	**60-5068**	74.58

519418

Sensors

65715

TruSens
HC-SR501 PIR Motion Detector

The HC-SR501 is a **PIR motion detector** with an adjustable range that can sense up to 7m. The sensor uses infrared technology and features high sensitivity, ultra-low voltage mode, high reliability, and is ideal for using in battery-operated equipment. This sensor is designed for use in security products, alarm systems, lighting control, industrial automation, toys, etc.

- 7m Sensing range
- Wide voltage range
- Low power consumption
- Adjustable delay
- Temperature compensation
- For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	10+	50+
HC-SR501	**74-1108**	3.85	3.50	3.15

565683

TruSens
HC-SR504 Ultrasonic Ranging Module

The HC-SR504 is a non-contact ultrasonic ranging module with a 20 to 4000mm range. The module includes ultrasonic transmitter, receiver, and control circuit - all on a compact circuit board.

- Easy to use
- Ranging accuracy up to 3mm
- Compact dimensions
- For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	10+	50+
HC-SR504	**74-1109**	4.05	3.68	3.25

565684

Devantech
Ultrasonic Range Finder SRF05

The SRF05 is a new design of ultrasonic range finder and features an extended detection range. Two operational modes are available, single pin for trig/echo or 2-pin for compatibility with the SRF04.

The input trigger is a 10µS min. TTL level pulse and the echo pulse is a positive TTL level signal, with the width proportional to the object range.

- Based around a PIC processor
- Only requires a single 5V DC power supply
- Typical current consumption of 30mA
- Maximum range is a long 4m
- New design minimises pin usage host controller
- Ideal for low cost robotic applications

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	3+	6+
Ultrasonic range finder	**78-1085**	16.26	15.67	13.98

82276

Digital Humidity/Temperature Sensors HYT Series

A range of humidity sensors that use digital technology for increased accuracy and ease of use. The devices are precisely calibrated and deliver high linearity.

- Splash water proof with protection filter
- Waterproof membrane filter
- Precisely calibrated and temperature compensated
- Chemical resistant, dew formation resistant
- Mechanically robust
- Low Hysteresis, compensated Linearity error
- SIL-connections, plug-in type, RM 1.27mm
- I2C, address 0x28 or alternative address

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	5+	10+
HYT 271	**50-9442**	29.04	25.12	
HYT 939	**50-9443**	62.26	50.74	48.14

519734

Temperature Sensors

Powerful temperature measuring sensor.

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	3+
CON-DS1820-BT	**50-2066**	6.66	6.02

520116

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ANALOG DEVICES

TMP36GT9Z (TMP36) Temperature Sensor TO92

The TMP36GT9Z is a precision, low voltage centigrade temperature sensor that provides a voltage output that is linearly proportional to the °C temperature. The sensor does not require any external calibration to provide typical accuracies of ±1°C at +25°C and ±2°C over the -40°C to +125°C temperature range.

The low output impedance of the device and its linear output and precise calibration simplify interfacing to temperature control circuitry and ADCs, and it is intended for single-supply operation from 2.7 to 5.5V maximum. The supply current runs well below 50µA, providing very low self-heating - less than 0.1°C in still air. In addition, a shutdown function is provided to cut the supply current to less than 0.5µA.

The TMP36 is specified from -40°C to +125°C and provides a 750mV output at 25°C, operating to 125°C from a single 2.7V supply. The sensor is functionally compatible with the LM50, with an output scale factor of 10mV/°C.

- TO-92 Package
- Low voltage operation (2.7 to 5.5V)
- Calibrated directly in °C
- 10mV/°C scale factor
- Typical ±2°C accuracy over temperature
- Typical linearity ±0.5°C
- Stable with large capacitive loads
- Specified -40°C to +125°C, operation to +150°C
- Less than 50µA quiescent current
- Shutdown current 0.5µA max
- Low self-heating
- Qualified for automotive applications

Type	Order code	1+	25+	100+	250+
Temperature sensor	**82-1005**	1.48	1.05	0.876	0.827

567225

ROBOT ELECTRONICS

3-Way JST to JST Cable 30cm 2mm Pitch

This cable assembly is suitable for use with the RD02 12V robot drive system and the Sharp infrared sensors.

- 3-way JST Connectors
- Length 30cm
- Pitch 2mm

Type	Order code	1+
Cable assembly	**70-6412**	1.71

554075

Proximity Switches

65735

CONTRINEX

Inductive Sensors Cable Interface

These high-quality inductive proximity switches from Contrinex feature very long switching distances and an exceptionally good switching point temperature stability. Suitable applications include presence detection of metal objects, position control, counting tasks, distance control on end positions, quality control, etc.

- Cable termination
- Small self-contained inductive sensors
- Very rugged and reliable

For technical specialication visit **www.rapidonline.com**

Operating distance	Size	Order code	1+
Series 503			
6mm	M12	**50-3760**	38.77
Series 603			
1.5mm	M8	**50-3725**	26.39
5mm	M18	**50-3732**	29.69
Series 623			
1mm	Ø3mm	**50-3737**	54.06
1mm	M4	**50-3738**	66.89

519682

Microswitches

65778

CAMDENBOSS
CONNECT. ENCLOSE. INNOVATE.

Subminiature V4 Microswitches

Type V4 miniature microswitches with SPDT switching and a long life coil spring mechanism.

- Available in five standard actuator forms
- PCB pins or solder terminals
- **Camden CSM series**
- **CUL** approved

Rapid is an official distributor of CamdenBoss products. The products listed here are those that Rapid hold in stock – but we have access to many more, including the company's complete range of terminal blocks.

For technical specialication visit **www.rapidonline.com**

		MOQ 2			
Type	Order code	2+	25+	100+	250+
Solder terminal					
00A Button	**78-2400**	1.06	0.825	0.711	0.65
01A 14.5mm Lever	**78-2402**	0.738	0.666	0.569	0.496
Type	Order code	2+	26+	100+	
02A 22.6mm Lever	**78-2404**	1.06	0.821	0.719	
05A 14.5mm	**78-2407**	0.463			
Type	Order code	2+	25+	100+	250+
08A 43mm Lever	**78-2408**	1.09	0.996	0.899	0.813
	MOQ 100 - In Multiples of 5				
Type	Order code	100+	300+		
PCB termination					
00C Button	**78-2410**	0.48	0.472		
		MOQ 2			
Type	Order code	2+	25+	100+	250+
01C 14.5mm lever	**78-2412**	1.10	0.841	0.73	0.685
02C 22.6mm Lever	**78-2414**	1.03	0.811	0.693	
05C 14.5mm Roller lever	**78-2416**	1.03	0.943	0.853	
08C 43mm Lever	**78-2418**	0.816	0.712	0.611	

30301

R-TECH

Microminiature Microswitches

A range of micro-miniature microswitches, measuring only 12.7mm in length.

- 1A, 250V AC switching ability in a truly miniature package
- PCB solder terminals
- Single pole changeover contacts
- Available in button and lever operation styles

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
Microminiature button	**78-0730**	0.854	0.726	0.661	
Microminiature lever	**78-0735**	0.764	0.663	0.609	0.57

586722

Push Button Switches

SCI PARTS

R13-23 Series Square Push Switches - 1A

A range of attractive large push switches with actuator button in red or black.

- SPST contacts
- Available with momentary push-to-make or latching action
- Body dimensions 34 x 15 x 15mm
- Panel cut-out 12mm
- Contacts rated 1A, 250V AC

For technical specialication visit **www.rapidonline.com**

		MOQ 5			
Type	Order code	5+	25+	100+	500+
SPST red momentary	**78-0110**	0.665	0.585	0.515	
SPST black momentary	**78-0112**	0.591	0.527	0.463	
SPST red latching	**78-0115**	0.741	0.684	0.593	0.528
SPST black latching	**78-0117**	0.905	0.837	0.698	

30275

SCI PARTS

Miniature Latching Push Switch Large Button

Low-cost, panel mounting, latching 2P SPST push switch that has a large button.

- Available with red button
- Fits into 7mm panel cut-out, max. thickness 4mm
- Silver plated brass solder terminals
- Nylon frame to **UL 94V-2**

For technical specialication visit **www.rapidonline.com**

Type	Colour	Order code	1+	25+	100+	500+
Latching switch	Red	**78-0235**	1.05	0.929	0.827	0.757

75719

SCI PARTS

Miniature SPST Momentary Push-Button Switches

These low cost push to make switches come with an all-plastic body and chrome locking nut.

- Non-locking momentary action
- Available with red or black button
- 5.2mm (M5) dia. panel cut-out
- Dimensions 19(L) x 8mm diameter
- Silver plated brass terminals
- **UL 94V-2** approved

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5			
Type	Order code	5+	25+	100+	500+
Red push switch	**78-0186**	0.527	0.463	0.406	
Black push switch	**78-0187**	0.635	0.527	0.489	0.406

71431

SCI PARTS

Miniature SPST LED Latching Push Switch

A miniature low cost push to make switch with all-plastic body.

- Latching action
- Available with red LED actuating button
- Snap-fit into a 9.3mm dia. panel cut-out
- Easy to install into panel
- Silver plated brass terminals
- Dimensions 25(L) x 11mm diameter
- **UL flame 94HB** approved

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+
Red push button	**78-0188**	0.75

71429

Slide Switches

65770

R-TECH

Miniature Slide Switch DPDT

A miniature slide switch with solder tag connections and break-before-make DPDT contacts, suitable for a wide range of miniature electronic applications.

- Contact configuration: DPDT, break-before-make
- Rated current::
- 300mA 125V AC
- 500mA 50V DC
- Terminals: solder lug
- Length: 23.3mm
- Width: 7.7mm
- Height: 14.2mm
- Fixing centres: 19mm
- Fixing holes: threaded 2x M2 x 0.4

Type	Order code	10+	50+	100+	500+
DPDT slide switch	**78-0560**	0.511	0.416	0.334	0.257
DPDT slide switch	**78-0560**	0.511	0.416	0.334	0.257

583648

R-TECH

Standard DPDT Slide Switches

Standard slide switches with solder tag connections and DPDT break-before-make contacts.

- Also available with centre-off position
- Suited to a wide range of miniature electronic equipment
- Contact rating (**78-0561**): 0.5A, 50V DC
- Contact rating (**78-0562**): 0.3A, 50V DC
- Fixing centres: 28mm

			MOQ 10		
Contact configuration	Order code	10+	50+	100+	500+
DPDT	**78-0561**	0.669	0.546	0.438	0.337
DPDT centre-off	**78-0562**	0.455	0.37	0.302	0.232

583676

Pricing

Pricing correct at time of going to press.
For up-to-date pricing visit **www.rapidonline.com**

R-TECH

DPDT Miniature Slide Switch

A low-cost SPDT miniature vertical slide switch suitable for PCB mounting or wiring.

- Current rating: 0.5A
- Voltage rating: 50V DC
- Silver plated solder terminals
- Pitch 4mm
- Long lifespan >5000 operations

Type	Order code	10+	50+	100+	500+
SPDT slide switch	**78-0564**	0.313	0.292	0.255	0.223
SPDT slide switch	**78-0564**	0.313	0.292	0.255	0.223

583678

SH

SPDT Ultraminiature Slide Switch

This ultra-miniature SPDT slide switch is perfect for telecommunication products, computer peripherals, networking products, test & measurement equipment use as well as for general low-voltage use in simple projects and kits.

- Voltage rating: 6V DC
- Current rating: 0.3A
- Timing: non-shorting (break before make)
- Operating travel: 2mm
- Operating force: 200 ± 100gf
- Body dimensions: 8.5 x 3.5 x 3.5mm
- PCB pins: 0.7 x 0.3mm on a 2.5mm pitch
- **Salecom type: SHM-1260-H**

Type	Order code	1+	100+	500+
Mini slide switch	**76-0306**	0.347	0.26	0.235

583455

TAIWAY Switches Since 1976

1260 Ultraminiature Slide Switch

A miniature slide switch with SPDT contacts.

- Body measures just 9.0 x 3.5 x 3.5mm
- Ideally suited to a wide range of low voltage applications
- Right angle actuator button making it ideal for edge of board applications
- Pins are on a 2.50mm pitch making the switch suitable as an alternative to jumpers etc.
- Contacts rated 0.3A at 6V

		MOQ 5 - In Multiples of 5		
Type	Order code	5+	25+	100+
Ultramin slide switch	**76-0303**	0.505	0.439	0.373

60329

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Series 82 Range
Push Button Switches

www.rapidonline.com

Toggle Switches

65768

SCI PARTS

Sub-miniature Toggle Switches

A range of low-cost panel mounting sub-miniature toggle switches.

- Excellent value
- Ideal for use where space is at a premium
- **SCI MTE** series

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+	500+
2P SPST On-Off	**75-0095**	1.14	0.933	0.765	0.70
3P SPDT On-On	**75-0096**	0.59			
6P DPDT On-On	**75-0097**	1.28	1.09	0.89	0.816

79431

SCI PARTS

Miniature Toggle Switches

A range of low cost panel mounting miniature toggle switches.

- Provides exceptional value
- Available in single pole and double pole options including momentary biased options
- All switches are fully approved to **UL and CSA**
- **SCI TA102/TA202** series

For biased switches (On) indicates momentary action.

For technical specialication visit **www.rapidonline.com**

		MOQ 5 - In Multiples of 5		
Type		Order code	5+	25+	100+
SPST		**75-0125**	1.13	0.995	0.90
SPDT	On-Off	**75-0130**	0.983	0.899	0.816
SPDT	Centre-Off	**75-0135**	1.05	0.902	0.809
SPDT	On-Off-(On)	**75-0152**	1.10	1.01	0.905

		Price each		
Type		Order code	1+	25+	100+
SPDT	(On)-Off-(On)	**75-0157**	1.38	1.22	1.06
DPDT	On-On	**75-0140**	1.35	1.23	1.10
DPDT	Centre-Off	**75-0145**	1.38	1.24	1.10

30254

SH

Miniature Toggle Switches

A range of panel mounting latching and momentary toggle switches.

- Choose from a variety of contact configurations
- Solder lug terminations
- Silver plated copper alloy contacts
- Stainless steel housing
- **Salecom T80-T** series

For biased switches (On) indicates momentary action.

For technical specialication visit **www.rapidonline.com**

			MOQ 5 - In Multiples of 5		
Contacts	Function	Order code	5+	25+	100+	500+
SPST	On-Off	**75-0082**	1.25	0.945	0.865	0.84
SPDT	On-None-On	**75-0083**	0.953	0.852	0.741	0.716
SPDT	On-Off-On	**75-0084**	0.912	0.842	0.78	

			Price each		
Contacts	Function	Order code	1+	25+	100+	500+
SPDT	On-Off-(On)	**75-0085**	1.47	1.27	1.02	
SPDT	(On)-Off-(On)	**75-0086**	1.61	1.57	1.16	1.08

			MOQ 5 - In Multiples of 5		
Contacts	Function	Order code	5+	25+	100+
DPDT	On-None-On	**75-0087**	1.14	1.07	0.993

			Price each		
Contacts	Function	Order code	1+	25+	100+
DPDT	On-Off-On	**75-0088**	1.45	1.26	1.10
DPDT	On-Off-(On)	**75-0089**	1.40	1.28	1.14
DPDT	(On)-Off-(On)	**75-0090**	1.67	1.52	1.37

75284

Education

05

Components & Accessories

Tactile Switches

DTS-3 Series Miniature Rectangular Tactile Switches

Miniature rectangular tactile switches.

● Measures just 3.5 x 6mm in size
● Choice of button length
● Switches have a positive action with tactile feedback
● SPNO momentary contacts
●

Not suitable for PCB washing

For technical specialication visit **www.rapidonline.com**

		MOQ 10			
Button length	Order code	10+	100+	500+	1000+
4.3mm	**78-1120**	0.106	0.083	0.07	0.062
5.0mm	**78-1122**	0.106	0.083	0.07	0.062

36679

Tilt Switches

Non-Mercury Tilt Switches

A range of economical, non-mercury tilt switches, which operate when tilted approximately 10° from the horizontal.

● Contact is made by gold-plated ball-bearings which roll onto the contact
● Two styles are available:
● **78-0752** has a single gold-plated pin, with a lead attached to the case
● **78-0754** has two nickel-plated leads
● For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	100+	500+
2 Nickel leads	**78-0752**	1.13	0.91	0.774	0.649
Gold pin + lead	**78-0754**	1.13	0.91	0.774	0.649

34909

Motion, Motors & Accessories

70921

HS Series Analog Servos

A wide range of analog servos from Hitec. The range includes models in standard, mini, midi and custom sizes.

For technical specialication visit **www.rapidonline.com**

Part no.	Type	Order code	1+
HS-805MG	Custom	**64-1487**	98.70
HS-65MG	Mini	**64-1471**	31.90
HS-81	Mini	**64-1472**	12.92
HS-322HD	Standard	**64-1480**	14.03
HS-645MG	Standard	**64-1484**	35.81
HS-311	Standard	**64-1479**	14.40

555628

≡Rapid
Pro SG90 Mini Servo

The **Rapid Pro SG90 Mini Servo** is a low-cost, well specified servo ideal for use in radio-controlled models and for interfacing with microcontroller systems like Arduino, Raspberry Pi, PICAXE, etc.

● Size: 23 x 12.2 x 29mm
● Low-cost, high quality
● Supplied complete with control horns and mounting screws
● **Rapid Pro type SG90**

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+	25+	50+
Mini servo	**37-1330**	5.03	4.46	3.81

530144

FEETECH
FS90 Mini Servo 120B0 Operating Speed 0.12sec/60B0

The FS90 is an analog micro servo that has 120° of rotation. The servo is ideal for the beginning roboticist and is perfect for use with the Motor Shield for **Arduino**. The servo can be controlled using any servo code, hardware or library and to control with an Arduino, just connect the orange control wire to pin 9 or 10 and use the Servo library included with the Arduino IDE.

● Good for making simple moving robots
● Small dimensions means servo can fit in confined spaces
● Lightweight
● Operating voltage 4.8 to 6V
● A 3-pin 10cm cable is available for connecting servos (**37-1337**)

For technical specialication visit **www.rapidonline.com**

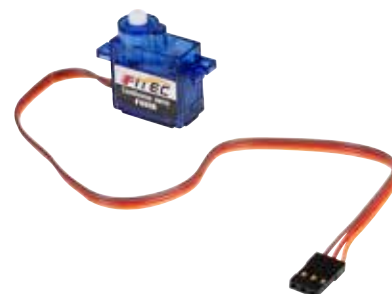| Type	Order code	1+	25+
FS90 Servo	**37-1339**	4.07	3.66
FS90 Servo	**37-1339**	4.07	3.66
FS90 Servo	**37-1339**	4.07	3.66

560555

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FEETECH
FS90R Analog Micro Servo Continuous Rotation

The FS90R is an analog micro servo that is capable of continuous rotation clockwise or anti-clockwise, as opposed to moving to a set position. The servo is ideal for the beginning roboticist and is perfect for use with the Motor Shield for **Arduino**. The servo can be controlled using any servo code, hardware or library and to control with an Arduino, just connect the orange control wire to pin 9 or 10 and use the Servo library included with the Arduino IDE.

Also available is a wheel (**37-1338**) that can be attached directly to the servo. The servo and wheel are also available as a package (**37-1336**).

● Good for making simple moving robots
● Small dimensions means servo can fit in confined spaces
● Lightweight
● Operating voltage 4.8 to 6V
● A 3-pin 10cm cable is available for connecting servos

For technical specialication visit **www.rapidonline.com**

Type	Order code	1+
FS90R 360° Servo	**37-1335**	3.31
Servo and wheel	**37-1336**	3.71
Wheel for servo	**37-1338**	0.99

559636

FEETECH
SCS15 Smart Control Digital Servo with Metal Gears and Brackets

The **SCServo is a multipurpose UART BUS robot** servo designed for use with Arduino. The unit can work in both servo mode and wheel mode. The servo mode can be wired together in robots to control limbs and set them at specific angles. The wheel mode is intended for wheel-type operations. The SCServo can give feedback on the values of position, temperature, load, speed and input voltage, as well as having the ability to set parameters such as speed of rotation, max. output torque, operating voltage limit, operating temperature limit, etc.

To connect to Arduino The TTLinker control board is required (available separately as **37-1333**). The TTLinker is a signal conversion board. Arduino needs to convert its UART signals to the half duplex type and through TTLinker connect to SCServo. The TTLinker also has more interfaces to make provision for more sensors.

● Supplied with metal gears and brackets
● A 70mm wheel with tyre is also available (**37-1334**)
● SCServo is easily controlled by Arduino

- The SCServo has a unique ID number to identify on BUS network
- Operating voltage range 6 to 8.4V
- 73 rpm Max. operating speed at 8.4V

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	5+	10+
SCS15 Servo	**37-1332**	30.06	27.74	25.96
TTLinker board	**37-1333**	2.37		
70mm Wheel and tyre	**37-1334**	0.223		
3-Pin servo cable	**37-1337**	0.399		

559635

MFA/COMO DRILLS

917D Multi-Ratio Gearbox and Motor

A multi-ratio gearbox available supplied fully assembled or in kit form.

- Supplied with drive motor which operates on 1.5 or 3.0 volt DC power sources
- Suitable for battery or transformer operation
- Sturdy, simple and versatile design
- Suitable for a host of uses from powering models and robots to teaching the principles of mechanics
- Current consumption depends on load but is within the range 0.2 to 0.8A
- Output shaft is 3mm diameter
- Gearbox is mounted on flanged frame for easy mounting

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	10+
Gearbox (kit form)	**37-1210**	14.72	12.84
Gearbox (assembled)	**37-1215**	7.70	7.35

64469

MFA/COMO DRILLS

918D Series Fixed Ratio 25mm Diameter Spur Geared Motors

Suitable for light industrial, educational, modelling and R&D applications. They are of metal construction and fitted with quality 3 pole motors with carbon brushgear. Available in 1.5-3V or 12-24V options, they have 4mm diameter central output shafts with key flats.

For speed regulation see panel mounted PWM speed regulator (see order code **37-1245**). (Not for use below 6V operation)

- Designed for heavy duty industrial and model applications.
- Robust unit boasts a powerful high quality motor
- Sintered Steel bearings
- Precious metal motor brushes
- No maintenance is required
- Gears are equally efficient in either direction
- 3 versions available (please see specification or price panel)
- **MFA/Como 918D** series

For technical specialisation visit **www.rapidonline.com**

Ratio	Voltage	Order code	1+	5+	10+
15:1	1.5 to 3V	**37-1085**	8.85	7.45	6.62
15:1	12 to 24V	**37-1086**	8.47	7.57	
30:1	1.5 to 3V	**37-1226**	9.13	8.29	7.56
30:1	12 to 24V	**37-1228**	10.55	9.57	9.10
100:1	1.5 to 3V	**37-1222**	9.13	8.29	7.87
100:1	12 to 24V	**37-1224**	13.86	11.67	11.10
250:1	1.5 to 3V	**37-1087**	10.84	9.14	
250:1	12 to 24V	**37-1088**	10.53	8.84	
500:1	1.5 to 3V	**37-1101**	11.99	11.13	10.53
500:1	12 to 24V	**37-1102**	9.22	8.56	
1024:1	1.5 to 3V	**37-1089**	9.22	7.74	7.13
1024:1	12 to 24V	**37-1090**	14.64	12.31	11.27

82344

MFA/COMO DRILLS

Geared Motor Accessory Kit

A kit containing a useful selection of mechanical parts, ideal for the construction of motorised models, robots, buggies, technology projects, etc.

- Motorised gearbox
- Wheels
- Hardware
- Gears
- Rack and pinion
- Perforated metal sheet and strips
- Axles/shafts
- Nuts
- Bolts and washers
- Chain and sprockets
- Worm drive
- Toggle switch
- Size D 1.5V zinc-chloride battery and battery box

Type	Order code	1+	5+
Geared motor kit	**37-1100**	25.04	24.36

64471

PIMORONI

Micro Metal Gearmotors with Extended Back Shaft

These **Micro Metal Gearmotors from Pimoroni** are ideal for small robot platforms or other light mechanical loads. They have a 3mm diameter D-shaped output shaft which is 9mm long and a 1mm diameter back shaft which is 4.5mm long. The back shaft is a great spot to install an encoder to track the motor's speed and position. All the motors in the range are the same size but with different gear ratios, allowing you to choose the one that's right for your next project.

- All metal gears
- Back shaft for an encoder
- Same size motor, different gear ratios

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+
50:1	**75-0638**	4.81
298:1	**75-0639**	4.81
1006:1	**75-0640**	4.63

561606

Order online
Save time, and place your order at:
www.rapidonline.com
24 hours a day

ROBOT ELECTRONICS

EMG30 Motor with Gearbox and Integrated Encoder

The EMG30 is a 12V motor and 30:1 reduction gearbox in a single unit giving a 1.5 to 200rpm output speed. It also has a built-in hall-effect motor encoder which gives precise control.

- Terminated with a 6-way JST connector for easy connection
- Mounting bracket available separately (70-6406)
- Can be controlled via I2C using the MD25 driver
- For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+
EMG30 Motor	**70-6404**	29.71

554056

≡Rapid

Worm Drive Gearbox with Motor

A robust worm-drive gearbox powered by an MM28 motor (included).

- Most suitable for applications where an easy to fit, high torque output is required
- Ideal for student based projects including robots and buggies

For technical specialisation visit **www.rapidonline.com**

Type	Order code	1+	10+	50+
Worm drive gearbox	**37-0310**	3.66	3.15	2.89

64483

CIC
2-in-1 Gearbox

A gearbox kit which contains:

- Electric motor (3-6V)
- 2 sets of gears giving either a 60:1 or 288:1 reduction (approx. 200 or 42rpm)
- Gearbox chassis and shafts

Type	Order code	1+
2-in-1 Gearbox	**13-1020**	4.81

64472

≡Rapid

Self Adhesive Motor Mount

A push fit motor mount to suit our range of miniature motors.

- Base has self adhesive surface for easy mounting of the motor as required
- Colour may vary
- Supplied in **packs of 10**

Type	Order code	1+
Motor mount	**37-0360**	2.28

64468

Anti-static products

65751

ANTISTAT
ESD & PRODUCTION CONSUMABLES

Kapton Tape

Although thin and lightweight, Kapton® tape offers high levels of protection from chemicals, moisture, gases and foreign materials, so that highly sensitive parts can operate reliably in demanding environments.

Applications include wave solder masking tape for PCB assembly and other applications where a thin, tough insulating material is required, e.g. for wrapping capacitors, coils, transformers, etc.

- High temperature resistance
- Low residue
- Silicone adhesive
- Thickness 0.065mm
- Supplied on **33m reels**

Type	Order code	1+	10+
6mm	87-9318	9.11	8.51
10mm	87-9320	10.35	9.61
12mm	87-9322	10.48	10.23
19mm	87-9324	16.76	15.96
25mm	87-9326	18.71	18.18

528307

ANTISTAT
ESD & PRODUCTION CONSUMABLES

Workstation Kit Blue Mat

This ESD workstation kit from Antistat includes blue matting, signage, bonding plugs, wrist strap and leads.

Kit includes:
- 1 ESD mat (600 x 1200 x 2mm) with 10mm stud in each corner
- 1 ESD Protected Area vinyl sign
- 1 Earth bonding plug 3x10mm stud
- 1 x 10mm fabric adjustable wrist strap hypo allergenic
- 1 x 10mm coiled earth lead
- 1 x 10mm straight lead
- Instruction leaflet

Other mat colours available on request.

Colour	Order code	1+
Blue	87-9528	45.14

530106

ANTISTAT
ESD & PRODUCTION CONSUMABLES

ESD Smooth Finish Bench Matting, 10m Rolls

These great value anti-static mats from Antistat are designed to be laid out in workshops, laboratories or any other areas used for ESD components, computers, communication equipment and integrated circuits etc. These smooth-textured mats are 1.2m wide and supplied on **10m rolls**.
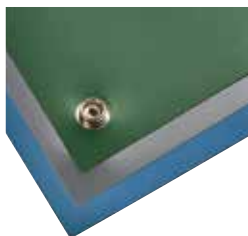
- Made from anti-static (conductive) and static-dissipative materials with synthetic rubber
- 2mm thick double-layer structure
- Surface layer is a 0.5mm thick static-dissipative layer
- Bottom layer is a 1.5mm conductive layer
- Available in choice of blue, grey or green

Colour	Order code	1+
Grey	87-9714	281.19
Blue	87-9716	267.80
Green	87-9718	238.88

549033

ANTISTAT
ESD & PRODUCTION CONSUMABLES

Conductive Laminating Sheets – Packs of 100

These laminating film pouches will work with any standard document laminating machine but have been specially formulated to be conductive for use in ESD Protection Areas.

- Work with any standard laminating machine
- Ideal for protecting instruction documents
- Use at workstations where loose paper is not permitted
- Suitable for clean-rooms
- Made from PET / EVA
- 80 micron thickness
- 95gsm
- Available in **A4 and A3 sizes**
- Supplied in packs of 100

		MOQ 2
Size	Order code	2+
A4	87-9870	114.16
A3	87-9872	139.05

568235

ANTISTAT
ESD & PRODUCTION CONSUMABLES

ESD Solvent Dispenser

This 4oz ESD solvent dispenser from Antistat is ideal for use in cleanroom environments.

- Bottle size 4oz
- Manufacturer's part **146-0041**

Size	Order code	1+	10+
4oz	87-9480	17.68	16.11

530089

ANTISTAT
ESD & PRODUCTION CONSUMABLES

Silica Gel Desiccant Sachets Non-Indicating Packs of 100

Silica gel is a synthetically produced form of silicon dioxide in the form of hard, irregular granules or beads. Its micro-porous structure of interlocking cavities gives it a very high surface area, making it a high capacity desiccant.

Water molecules adhere to the gel's surface because it exhibits a lower vapour pressure than the surrounding air. There are no chemical reactions, by-products or side effects produced by silica gel - water vapour is simply absorbed into its internal pores.

- Silica gel desiccant
- Non-indicating (no change in appearance when water is absorbed)
- Available in convenient paper sachets in a **range of sizes**
- Supplied in packs of 100

		Price each
Size	Order code	1+
40 x 75mm	87-9922	16.64
		MOQ 10
Size	Order code	10+
50 x 110mm	87-9924	18.15
		Price each
78 x 115mm	87-9926	28.30
93 x 125mm	87-9928	39.99

568247

BONDLINE
BONDLINE ELECTRONICS LIMITED

Loc-Top Pink Antistatic Bags

These **pink anti-static bags from Bondline** are ideal for use in transporting non-static sensitive devices, (e.g. nuts, bolts etc.) into an Electro-static Protected Area. (E.P.A.).

- Size ranges available: 75 x 125mm to 450 x 600mm (W x L)
- Design: Loc-Top resealable
- Supplied in **packs of 100**

Size (W x L)	Order code	1+	10+
75 x 125mm	87-1465	9.35	6.68
100 x 200mm	87-1467	7.45	5.84
125 x 200mm	87-1469	14.26	11.16
200 x 250mm	87-1473	12.19	11.51
200 x 300mm	87-1475	15.75	14.70
250 x 350mm	87-1479	17.13	15.46
300 x 400mm	87-1481	26.71	25.04
450 x 500mm	87-1485	46.31	42.10

519379

Teknis

Electrostatic Conductive Utility Boxes with Foam

www.rapidonline.com