

RELAYS

SIL RELAYS



SUGAR CUBED SIZE RELAY



MINI RELAYS



POWER RELAYS



AUTOMOTIVE RELAYS



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SQUIRES MODEL & CRAFT TOOLS

REED RELAYS

SIL REED RELAYS a range of single pole normally open reed relays housed in compact single in-line epoxy moulded package. The ultra-slim package permits relays to be mounted on 0.2" centres. Completely washable and suited to auto insertion. Suitable for direct interfacing with TTL logic.

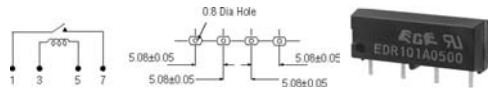


Technical Specification

Switching voltage (max)	200V DC	Operate time	0.5ms max.
Switching current max	0.5A	Release time	0.2ms max.
Carry current (max)	1A	Insulation resistance	1 x 10 ¹¹ min
Switching power	10W max	Life expectancy	1 x 10 ⁸ min
Hold off voltage (min.)	250V	Operating temperature	-40 to +85°C
Contact resistance	100mVΩ max.		

CODE	TYPE	Coil	Resistance	PRICE
660-160	SIL Reed Relay	3.75V - 10V DC	500Ω.....	£3.45
660-165	SIL Reed Relay	8.0V - 18V DC	1000Ω.....	£3.55

SIL REED RELAY a range of single pole reed relays sealed in a compact single in-line epoxy package. Suitable for a wide range of applications such as auto insertion and direct interfacing with TTL logic. Completely washable and UL approved.

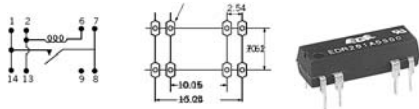


Technical Specification

Dimensions:	19 x 5 x 7mm
Contacts:	NO
Switching current:	0.5A DC max.
Carry current:	1A DC max.
Switching power:	10VA max.
Contact resistance:	150mΩ
Operate time:	1ms max. (including bounce time)
Release time:	10ms max.
Maximum voltage:	100V DC
Insulation resistance:	1010Ω min.
Coil voltage range:	5V 3.75-16V 12V 9-20V 24V 18-32V
Coil resistance:	5V 500Ω±1% 12V 1000Ω±10% 24V 2150Ω±10%
Operating temperature:	-40°C to +85°C

CODE	TYPE	PRICE
22-0670	SIL Reed Relay 5V Coil	£1.99
22-0672	SIL Reed Relay 12V Coil.....	£1.99
22-0674	SIL Reed Relay 24V Coil.....	£2.19

DIL REED RELAYS a range of dry reed relays housed in a standard 14 pin IC package of fully moulded construction compatible with automatic board processing and completely washable. Single pole normally open contacts.



Technical Specification

Switch voltage max	100V DC	Operate/release time	1.0ms/1.0ms
Switch current max	0.5A DC	Insulation resistance	10 ¹⁰ Ω
Switch power max	10VA	Operating temp	-40 to +85°C
Contact resistance max	200mΩmax.		
Electrical life	100 x 10 ⁶ (10V DC 10mA) min		

CODE	TYPE	Coil	Resistance	PRICE
660-170	DIL Reed relay	3.75 - 16V DC	500Ω.....	£2.25
660-175	DIL Reed relay	9.0 - 20V DC	1000Ω.....	£2.45
22-2412	DIL Reed relay	24V DC	2150Ω.....	£2.50

SPNC DIL REED RELAY a range of reed relays that are suitable for applications where small signals are being switched. The miniature and cost effective relays are ideal for automatic board processing. Their high sensitivity allows direct driving by TTL and have a very long life. The fully moulded DIP type construction is completely washable.



Technical Specification

Contact form	Nominal voltage VDC	Maximum voltage VDC	Pull-in voltage VDC	Dropout voltage VDC	Coil resistance Ω	Nominal input power (mW)
2A	5	11	3.75	0.8	140 ±10%	179
2A	12	20	9	1	500 ±10%	288
2A	24	32	18	2	2150 ±10%	268

Switching current:	0.5A DC max.
Carry current:	1.0A DC max.
Switching power:	10VA max.
Electrical life:	1x 10 ⁸ (10V DC, 10mA)
Contact resistance:	150mΩ max.
Operate time:	1.0ms max.
Release time:	0.5ms max.
Maximum voltage:	100V DC max.
Insulation resistance:	1010Ω min.
Dielectric strength:	coil to contact 14V DC min. across contacts 250V DC min.
Temperature range:operating	-40°C to +85°C
storage	-55°C to +125°C
Shock resistance:	30LCg min.

CODE	TYPE	PRICE
22-2415	SPNC DIL Reed Relay 5V Coil.....	£1.99
22-2416	SPNC DIL Reed Relay 12V Coil.....	£2.05
22-2417	SPNC DIL Reed Relay 24V Coil.....	£2.30

SPNO MAGNETIC SHIELD REED RELAY a high quality magnetic reed switch that uses a gas tube sealed switch which prevents dust and humidity influence. They have a wide operating temperature, low power consumption, low bounce time and high switching speed. 2.54mm IC terminal arrangement, suitable for cordless telephones, modems and burglar alarms etc.



Technical Specification

Part No.	Nominal voltage VDC	Coil resistance Ω ± 10%	Nominal input mW	Operating voltage VDC	Release voltage VDC	Maximum voltage VDC
12	5	500	50	3.2	0.8	11
15	12	1050	138	8	0.8	22

Switching current:	0.5A DC max.
Carry current:	1.0A DC max.
Switching power:	10VA max.
Electrical life:	10 ⁶
Contact resistance:	150mΩ max.
Contact material:	Rhodium
Operate time:	1.0ms max.
Release time:	0.5ms max.
Maximum voltage:	100V DC max.
Insulation resistance:	100 x 10 ⁶ Ω
Package type:	Metal
Dielectric strength:	coil to contact 500V DC min. across contacts 200V DC min.
Temperature range:operating	-40°C to +85°C
storage	-55°C to +125°C
Shock resistance:	30LCg min.
Pitch:	20.32 + 2.54mm

CODE	TYPE	PRICE
22-2418	Magnetic Shield Reed Relay 5V SPNO.....	£1.99
22-2419	Magnetic Shield Reed Relay 12V SPNO.....	£1.99

SQUIRES ELECTRONIC COMPONENTS

MICROMINIATURE RELAYS

SUGAR CUBED SIZED PCB RELAY SPST 5A a Single pole relay for direct mounting to printed circuit boards with very low power consumption typically 360mW. It has a low profile small size, less than 0.53 cubic inches and flux tight construction all sealed and resistant to wave soldering and cleaning. 24V DC or 110V AC capable of switching 5A loads.

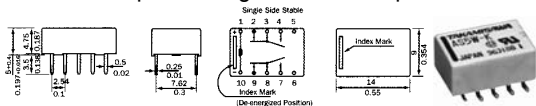


Technical Specification

Dimensions:	16.2 x 21.3 x 22.7
Contact rating:	5A at 24V DC or 240V AC (AgCdO)
Contact arrangement:	SPST
Coil voltages:	3V, 6V, 24V available
Pickup voltage:	80% of rated voltage
Contact resistance:	100mΩ Max.
Operate time:	15ms max. (at rated voltage)
Release time:	10ms max.
Insulation resistance:	100Ω min.
Dielectric strength:	750 V AC (1 Min.)
Ambient temperature:	Operating: -10°C to +50°C
Humidity:	45% to 85% RH
Operating life:	Mechanical: 1x 10 ² Operations min. Electrical: 1x 10 ² Operations min.

CODE	TYPE	PRICE
22-0362	PCB relay SPST 5A 3V DC 25Ω.....	£1.45
22-0364	PCB relay SPST 5A 6V DC 95Ω.....	£1.45
22-0368	PCB relay SPST 5A 24V DC 1500Ω.....	£1.45

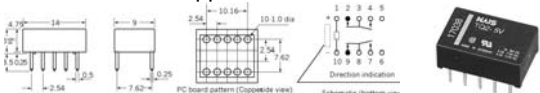
MICROMINIATURE 2A DPDT RELAY A range of very low profile, high sensitivity, 2 pole changeover relays, in a compact fully sealed package. Conform to FCC Part 68 withstanding surges of 1500V. Dual in line pins arranged on a 0.1in. pitch.



Specification	
Contact rating	2A 30V DC, 0.5A 125V AC
Maximum switching Power	30W DC
Voltage	220V DC, 250V AC
Current	2A
Contact arrangement	Double pole changeover
Contact material	Gold overlay silver alloy
Operate/release time	6ms/4ms
Coil consumption	140mW
Operating temperature	-40° to +85°C

CODE	TYPE	PRICE
660-250	Microminiature 2A DPDT Relay 5V DC.....	£4.20
660-252	Microminiature 2A DPDT Relay 12V DC.....	£4.20

LOW PROFILE RELAY DPCO 1A an ultra-small size, high sensitivity double-pole change-over relays, sealed to allow automatic washing. The relay coil is polarised, therefore polarity must be observed. UL and CSA approved. Matsushita TQ2 series.



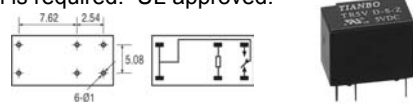
Technical specification

Contact rating	1A 30V DC/0.5A at 125V AC
Contact arrangement	Double pole, changeover
Contact material	Gold clad silver
Coil consumption	5V and 12V: 140mW, 24V: 200mW
Operate/release time	3ms max.
Pick-up/drop out voltage	75%/10%
Operating life - Mechanical	10 ⁸ operations, Electrical 2 x 10 ⁵ (1A 30V DC resistive)

CODE	TYPE	Coil	Resistance	PRICE
660-125	Low Profile Polarised Relay 5V DC	178Ω	.....	£6.50
660-130	Low Profile Polarised Relay 12V DC	1028Ω	.....	£6.50
660-135	Low Profile Polarised Relay 24V DC	2880Ω	.....	£6.75

SUBMINIATURE RELAYS

SUBMINIATURE RELAY SPCO 1A a range of subminiature, economically priced single pole changeover relays. Typical applications include computer equipment and security systems. This compact relay is ideal for high density designs where low power consumption is required. UL approved.

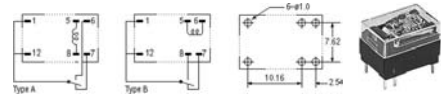


Technical Specification

Dimensions:	12.4 x 7.4 x 9.9mm
Contact rating:	1A 24V DC 0.5A 125V AC
Contact arrangement:	Single pole changeover
Contact material:	Ag+Au
Operate/release time:	4mS
Coil consumption:	360mW
Resistance:	5V 69Ω 12V 400Ω 24V 1600Ω
Temperature range :	-30°C to +70°C

CODE	TYPE	PRICE
22-0680	Subminiature Relay SPCO 5V 1A.....	£1.99
22-0685	Subminiature Relay SPCO 12V 1A.....	£1.99
22-0690	Subminiature Relay SPCO 24V 1A.....	£1.99

SUBMINIATURE RELAY SPCO1A a miniature single pole changeover relay. Ideally suited to low level switching or dry circuit switching. Featuring flux contamination immunity with DIL pins arranged on a 2.54mm pitch. Nominal coil power 450mW.

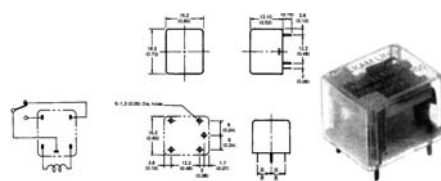


Technical Specification

Dimensions:	15 x 10 x 10.5mm
Contact rating:	1A at 24V DC, 0.5A at 100V AC
Max. switching power:	24W
Contact arrangement:	Single pole changeover
Contact material:	Gold overlay silver palladium
Operate/release time:	5ms/5ms
Coil operating range:	80-110% of coil voltage
Mechanical life:	>5 x 10 ⁶ operations
Electrical life:	>3 x 10 ⁵ operations
Operating temperature range:	-25°C to +50°C

CODE	TYPE	PRICE
22-0710	Subminiature Relay SPCO 1A 5V 56Ω.....	£2.99
22-0712	Subminiature Relay SPCO 1A 12V 320Ω.....	£2.99
22-0785	Subminiature Relay SPCO 1A 5V 56Ω.....	£2.99
22-0795	Subminiature Relay SPCO 1A 24V 1280Ω.....	£2.99

SUB-MINIATURE SPDT RELAY a low priced single pole changeover relay for low power use on printed circuit boards. power consumption is typically 360mW.



Contact rating.....3A at 24V dc or 110V ac(80W)
Contact arrangement.....Single pole changeover
Coil pickup voltage.....80% of rated voltage

CODE	TYPE	Coil	Resistance	PRICE
SMR-310	Sub-Miniature Relay SPDT	12V	400 Ω.....	£1.50

SQUIRES MODEL & CRAFT TOOLS

SUBMINIATURE RELAY DPDT 2A a compact lightweight relay for high density PCB mounting. Fully sealed construction with low coil power consumption. Applications include telecommunications and audio equipment. Available in 5V, 12V and 24V versions, CUL approved.

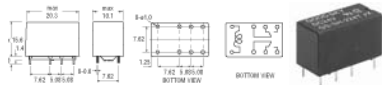


Technical Specification

	GS-SH-205T	GS-SH-212T	GS-SH-224T
Nominal voltage	5V DC	12V DC	24V DC
Max. allowable voltage	150%	150%	150%
Coil resistance	125Ω ±10%	720Ω ±10%	2880Ω ±10%
Contact arrangement	DPDT	DPDT	DPDT
Contact material	Ag alloy	Ag alloy	Ag alloy
Operate time	8ms max.	8ms max.	8ms max.
Release time	4ms max.	4ms max.	4ms max.
Nominal current	40mA	16.7mA	8.3mA
Coil operating range	150% max.	150% max.	150% max.
Temperature range	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C
Mechanical life	10 ⁷ operations at no load condition	10 ⁷ operations at no load condition	10 ⁷ operations at no load condition
Electrical life	10 ⁵ operations at rated resistive load	10 ⁵ operations at rated resistive load	10 ⁵ operations at rated resistive load
Dimensions	21 x 12 x 10mm	21 x 12 x 10mm	21 x 12 x 10mm

CODE	TYPE	PRICE
22-0000	Subminiature DPDT 2A Relay 5V.....	£2.60
22-0002	Subminiature DPDT 2A Relay 12V.....	£2.60
22-0004	Subminiature DPDT 2A Relay 24V.....	£2.60

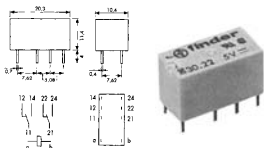
SUBMINIATURE RELAY A range of compact, lightweight relays to give high density PCB mounting. Coil consumption is 360mW. 92/8 gold silver alloy on silver palladium contacts allow low level switching (1V DC 1mA). Casing is epoxy resin sealed for washing.



Technical specification	
Contact rating	1A 24V DC/120V AC
Maximum switching Power	30W
Contact arrangement	Double pole changeover
Contact material	Ag alloy
Operate/release time	6ms/4ms max.
Pull in voltage	75% max.
Drop out voltage	10% min.
Life expectancy:- mechanical 10 ⁷ operations, Electrical 10 ⁵ operations.	

CODE	TYPE	PRICE
660-254	Subminiature Relay DPCO 5V DC 70Ω.....	£2.99
22-4692	Subminiature Relay DPCO 12V DC 400Ω.....	£2.99
660-257	Subminiature Relay DPCO 24V DC 1600Ω.....	£2.99

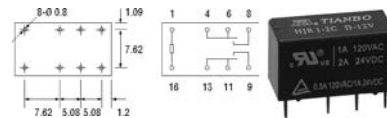
SUB-MINIATURE DPDT 1.25A RELAY a range of double pole double throw industry standard sealed relays to BT Type 47W, indicating acceptance for use on private or public telecommunications equipment. The relay is hermetically sealed and housed in a flame retardant case. DIL pins on a 0.1" pitch grid. UL and CSA approved.



Technical Specification	
Contact Rating	1.25A @ 250V AC
Contact Arrangement	Double pole changeover
Contact Material	Gold overlay silver contacts
Operate/Release time	15ms/10ms
Coil Operating Range	70-150% of coil voltage
Mechanical Life	>10 x 10 ⁶ cycles

CODE	TYPE	Coil Resistance	PRICE
660-000	Sub-Miniature Relay DPDT 5V	62 Ω	£4.75
660-005	Sub-Miniature Relay DPDT 12V	360 Ω	£4.75
22-0110	Sub-Miniature Relay DPDT 24V	4400 Ω	£4.75

SUBMINIATURE RELAY DPCO 1A a range of subminiature double pole high sensitivity changeover relays. Typical applications include security systems and telecommunication equipment. Equivalent to BT47 relays, UL and TUV approved.



Technical Specification

Dimensions:	21 x 11 x 12.2mm
Contact rating:	1A 24VDC/0.5A 120VAC TUV 2A 24VDC/1A 120VAC UL
Contact arrangement:	Double pole changeover
Contact material:	Ag+Au
Operate/release time:	6ms/4ms
Coil consumption:	360mW
Resistance:	5V 70Ω 12V 400Ω 24V 1600Ω
Temperature range:	-30°C to +70°C
Approvals:	UL, TUV

CODE	TYPE	PRICE
22-4460	Subminiature Relay 5V DC DPCO 1A.....	£2.79
22-4465	Subminiature Relay 12V DC DPCO 1A.....	£2.79
22-4470	Subminiature Relay 24V DC DPCO 1A.....	£2.79

SUBMINIATURE HIGH SENSITIVITY RELAY DPDT 2A a sub-miniature, high sensitivity double pole 2A relay. Featuring high impulse withstand voltage between coil and contacts, high dielectric strength of 2KV between coil and contacts, low power consumption and bifurcated crossbar contacts. Fully sealed.



Technical Specification

Dimensions:	14.8 x 7.3 x 9.2mm
Contact rating:	2A
Contact arrangement:	Double pole changeover
Contact material:	Silver, gold-clad
Operate/release time:	4ms/4ms
Resistance:	1028Ω
Coil consumption:	140mW
Temperature range:	-40°C to +85°C

CODE	TYPE	PRICE
22-4436	Subminiature High Sensitivity Relay 12V DPDT..	£5.99
22-4438	Subminiature High Sensitivity Relay 12V DPDT..	£5.99

MINIATURE RELAYS

MINIATURE PCB RELAY DPDT 3A a low-cost, highly reliable direct PCB mounting relay. With a fully sealed design it has low coil power consumption of approximately 510mW and a resistive load of 3A. Available with a coil voltage of 5, 6, 12 and 24V DC. Breaks up to 5A loads.



Technical Specification

Rated voltage:	110V AC/24V DC
Maximum switching capacity:	120W
Dimensions:	(L x H x W) 21.5 x 17.3 x 17.0mm

CODE	TYPE	PRICE
22-0421	Miniature PCB Relay 6V DPDT 3A.....	£1.79
22-0423	Miniature PCB Relay 24V DPDT 3A.....	£1.79

SQUIRES ELECTRONIC COMPONENTS

MINIATURE RELAY DPDT a low priced double pole changeover relay for direct mounting to printed circuit boards, flux tight construction. Power consumption is typically 510mW.

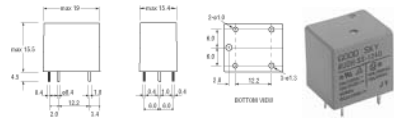


Contact rating.....5A at 24V dc or 110V ac(120W)
 Contact arrangement.....Double pole changeover
 Coil pickup voltage.....75% of rated voltage

CODE	TYPE	Coil	Resistance	PRICE
MR-400	Miniature Relay DPDT	6V	70 Ω	£2.15
MR-410	Miniature Relay DPDT	12V	280 Ω	£1.99

MINIATURE PCB POWER RELAYS

MINIATURE PCB POWER RELAY 12A A range of general purpose single pole changeover PCB mounting relays with sealed casings for washing. Contacts are 12A rated and silver alloy construction.



Technical specification	
Contact rating	12A 120V AC/24V DC
Contact arrangement	Single pole changeover
Contact material	Ag alloy
Operate/release time	15ms/5ms max.
Pull in voltage	75% coil voltage max.
Drop out voltage	5% min.
Life expectancy mechanical	10 ⁷ operations
electrical	10 ⁵ operations

CODE	TYPE	PRICE
660-259	Miniature PCB Power Relay 12V DC 320Ω.....	£1.75
660-260	Miniature PCB Power Relay 24V DC 1280Ω.....	£2.25

ULTRA MINIATURE PCB POWER RELAY 12A A low cost relay with a very low power consumption, 360mW coil for PCB mounting. Offered in two switching capacities with either 6A or 12A contacts. Sealed construction suitable for flow soldering.



Technical specification	
Contact rating	RW series 6A 230V AC, 10A 24V DC RWH series 12A 230V AC, 15A 24V DC
Contact arrangement	Single pole changeover
Contact material	RW series Ag alloy RWH series AgSnO ₂
Operate/release time	10ms/5ms max.
Pull in voltage	75% coil voltage max.
Drop out voltage	5% min.
Life expectancy mechanical	10 ⁷ operations
electrical	10 ⁵ operations

CODE	TYPE	PRICE
660-262	Ultra Mini PCB Power Relay 6V DC 6A 100Ω.....	£1.85
660-264	Ultra Mini PCB Power Relay 12V DC 6A 400Ω....	£1.85
660-266	Ultra Mini PCB Power Relay 24V DC 6A 100Ω....	£1.85
660-268	Ultra Mini PCB Power Relay 6V DC 12A 100Ω....	£1.85
660-272	Ultra Mini PCB Power Relay 12V DC 12A 400Ω..	£1.85
660-274	Ultra Mini PCB Power Relay 24V DC 12A 1600Ω	£1.85

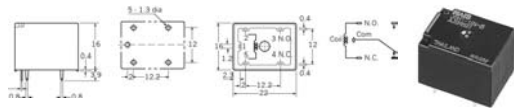
SLIM PCB 3A POWER RELAY a slim and compact, PCB mounting, 3A switching relay requiring low operating power (200mW). Designed for small load switching of domestic appliances and similar applications. The contacts are silver alloy and configured as normally open. The relay offers high shock and insulation resistance and is available in various coil voltages. UL and CSA approved.



Technical Specification	
Dimensions:	20.5 x 7.2 x 15.3mm
Nominal switching capacity:	3A 125V/250V AC, 3A 30V DC
Max switching power:	AC 831VA DC 90W
Operate/release time:	10ms
Contact/coil surge voltage:	10,000V
Expected life:	>10 ⁵
5V 40Ω	12V 720Ω
24V	2880Ω

CODE	TYPE	PRICE
22-5042	Slim PCB 3A Power Relay 5V DC.....	£2.99
22-5044	Slim PCB 3A Power Relay 12V DC.....	£2.99
22-5046	Slim PCB 3A Power Relay 24V DC.....	£3.20

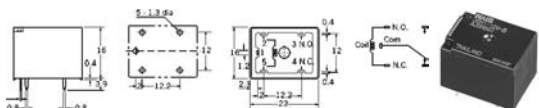
ULTRA-MINIATURE PCB POWER RELAY 10A an ultra-miniature PCB mounting power relay for applications such as air conditioners, heaters, office machinery, fax, vending machines and certain automotive uses e.g. power windows, antenna, central locking etc. The relays are of a sealed construction, with universal PCB footprint.



Technical Specification	
Contact rating	10A, 125V AC
Contact arrangement	Single pole changeover
Contact material	Silver alloy
Operate/release time	Approx 10ms
Pick-up/drop-out voltage	70%/10% of nominal
Operating Life Mechanical	10 ⁷ operations
Electrical	10 ⁵ operations

CODE	TYPE	Coil	Resistance	PRICE
660-190	PCB Power relay 10A 5V DC	69.4Ω	.....	£3.79
660-195	PCB Power relay 10A 6V DC	100Ω	.....	£3.79
660-200	PCB Power relay 10A 12V DC	400Ω	.....	£3.79
660-205	PCB Power relay 10A 24V DC	1600Ω	.....	£3.79

ULTRA-MINIATURE AUTOMOTIVE POWER RELAY 15A an ultra-miniature power relay for automotive applications such as power-windows, door locks, intermittent wiper, lighting, power antennae etc. The relays are of a sealed construction, with universal footprint and low pick-up voltage for high ambient use.



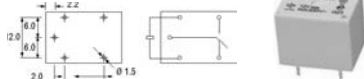
Technical Specification	
Operating voltage	12V nominal
Contact rating	15A, resistive, 10A inductive
Contact arrangement	Single pole change-over
Contact material	Silver alloy
Operate/release time	Approx 10ms
Pick-up/drop-out voltage	6.3V/0.9
Operating Life Mechanical	10 ⁷ operations
Electrical	10 ⁵ operations

CODE	TYPE	Coil	Resistance	PRICE
660-210	Automotive Power Relay 12V	225Ω	.....	£3.99

SQUIRES MODEL & CRAFT TOOLS

MINIATURE RELAYS

MINIATURE RELAY SPCO 10A a range of miniature single pole changeover PCB mounting relays rated at 10A. Housed in a compact sugar cube package. 4kV insulation between coil and contacts and sealed to IP67.



Technical Specification

Tolerance: 100? ±1Ω , >100Ω 2%
 Dimensions: 21.5 x 15.5 x 17mm
 Contact rating: 10A 250V DC
 Contact arrangement: Single pole changeover
 Contact material: Silver cadmium oxide
 Operate/release time: 10ms/5ms
 Coil consumption: 360mW
 Resistance: 5V 70Ω 12V 400Ω 24V 1600Ω
 Temperature range: -40°C to +85°C
 Approvals: VDE, UL

CODE	TYPE	PRICE
660-286	Miniature Relay 5V SPCO 10A.....	£1.99
660-288	Miniature Relay 12V SPCO 10A.....	£1.99
660-290	Miniature Relay 24V SPCO 10A.....	£1.99

DC MINIATURE SPDT 6A RELAY a range of slim solid state 6A single pole relays. PCB mounting ideal for industrial and commercial applications. With high capacity and low power consumption, 240V AC switching capacity, 5kV (1.2/50µs) insulation between coil and contacts, Ambient temperature -40°C to +85°C.

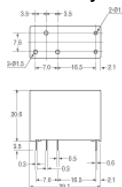


Technical Specification

Dimensions: 20.3mm (L) x 10.2mm (W) x 10.7mm (H)
 Contact arrangement: 1 CO (SPDT)
 Contact rating: 6A at 240V AC
 Contact arrangement: Single pole
 Contact material: Standard AgCdO (Silver Cadmium Oxide)
 Mechanical life: >10 x 10² cycles
 Operate/release time: 6ms

CODE	TYPE	PRICE
22-4086	5V DC miniature SPDT 6A Relay.....	£3.39
22-4087	12V DC miniature SPDT 6A Relay.....	£3.39
22-4088	24V DC miniature SPDT 6A Relay.....	£3.39
22-4089	48V DC miniature SPDT 6A Relay.....	£3.59

MINIATURE RELAY SPDT 10A A range of low cost vertical PCB or socket mounting general purpose DC relays with SPCO contacts, rated 10A @ 250V AC with 5kV insulation and 8mm creepage and clearance. Industry standard 3.5mm pitch pinning and silver cadmium contacts.

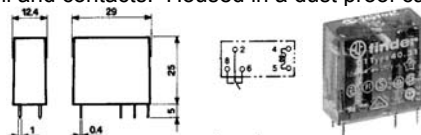


Technical specification

Contact rating: 10A @ 250V AC
 Contact arrangement: Single pole changeover
 Contact material: AgCdO
 Operate/release time: 15ms/8ms
 Coil consumption: 540mW
 Temperature range: -30° to +55°C

CODE	TYPE	PRICE
660-275	Miniature Relay SPDT 10A 6V 680Ω.....	£2.99
660-276	Miniature Relay SPDT 10A 12V 270Ω.....	£2.99
660-278	Miniature Relay SPDT 10A 24V 1100Ω.....	£2.99

MINIATURE SPDT RELAY a miniature industry standard PCB or socket mounting relay. Incorporates an 8mm isolation gap between coil and contacts. Housed in a dust proof case.

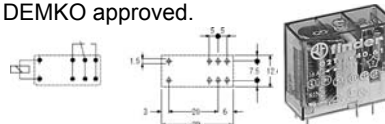


Technical Specification

Contact Rating: 10A at 240V ac
 Contact Arrangement: Single pole changeover
 Contact Material: Silver nickel
 Operate/Release Time: 10ms/7ms
 Coil Operating Range: 70-150%
 Coil Consumption: 500mW
 Temperature Range: -20°C to +70°C

CODE	TYPE	Coil	Resistance	PRICE
MR-900	Mini Relay SPDT 10A	6V	55 Ω.....	£3.99
MR-905	Mini Relay SPDT 10A	12V	300 Ω.....	£3.99
MR-910	Mini Relay SPDT 10A	24V	1200 Ω.....	£3.99
22-0915	Mini Relay SPDT 10A	48V	4800 Ω.....	£4.29
22-0920	Mini Relay SPDT 10A	24V	320 Ω.....	£4.29
22-0935	Mini Relay SPDT 10A	240V	1200 Ω.....	£7.49
SKT705	PCB Relay Socket.....			£1.15

MINIATURE RELAY SPDT 16A a range of industry standard vertical PCB or socket mounted relays. Incorporating an 8mm isolation gap between coil and contacts as required by VDE0700 and housed in a dustproof IP40 tinted case (AC versions have an orange tint). VDE, BEAB, UL, CSA, SEV, NF-USE, SETI, IMQ, SEMKO and DEMKO approved.

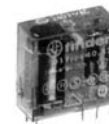


Technical Specification

Dimensions: 29 x 12.4 x 25mm
 Contact rating: 16A at 240V AC/30V DC
 Contact arrangement: Single pole changeover
 Contact material: Silver cadmium oxide
 Operate/release time: 10ms/7ms
 Coil operating range: 70-150%
 Coil consumption: 500mW
 Temperature range: -20°C to +70°C

CODE	TYPE	Coil	Resistance	PRICE
22-1010	Miniature Relay SPDT 16A 6V DC	55Ω.....		£4.29
22-1015	Miniature Relay SPDT 16A 12V DC	380Ω.....		£3.50
22-1040	Miniature Relay SPDT 16A 24V DC	1200Ω.....		£3.50
22-1045	Miniature Relay SPDT 16A 48V DC	3500Ω.....		£3.89
22-1080	Miniature Relay SPDT 16A 240V AC	3150Ω.....		£6.60

MINIATURE DPDT 5A RELAY miniature industry standard PCB or socket mounting relays. Incorporates an 8mm isolation gap between coil and contacts. Housed in a dust proof case.



Technical Specification

Contact Rating: 5A at 240V ac/30V dc
 Contact Arrangement: Double pole changeover
 Contact Material: Silver nickel
 Operate/Release Time: 10ms/7ms
 Coil Operating Range: 70-150%
 Coil Consumption: 500mW
 Temperature Range: -20°C to +70°C

CODE	TYPE	Coil	Resistance	PRICE
MR-110	Mini Relay DPDT 5A	6V	55 Ω.....	£4.55
MR-115	Mini Relay DPDT 5A	12V	300 Ω.....	£3.99
MR-140	Mini Relay DPDT 5A	24V	1200 Ω.....	£3.99
22-1145	Mini Relay DPDT 5A	48V	3500 Ω.....	£4.50
22-1170	Mini Relay DPDT 5A	24V	320 Ω.....	£4.99
22-1180	Mini Relay DPDT 5A	240V	1200 Ω.....	£6.99
SKT710	PCB Relay Socket.....			£1.45

SQUIRES ELECTRONIC COMPONENTS

MINIATURE RELAY DPDT 5A A low cost vertical PCB or socket mounting general purpose DC relay with DPCO contacts rated 5A 250V AC, with 5kV insulation and 8mm creepage and clearance. Industry standard 5.0mm pitch pinning and silver cadmium contacts.

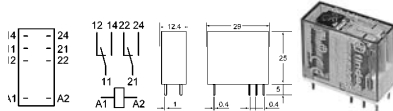


Technical Specification

Contact rating 5A @ 250V DC
 Contact arrangement Double pole changeover
 Contact material AgCdO
 Operate/release time 15ms/8ms
 Coil consumption 540mW
 Temperature range -30° to +55°C

CODE	TYPE	Coil	Resistance	PRICE
660-215	Miniature Relay DPDT 5A	12V	270Ω.....	£2.99
22-4612	Miniature Relay DPDT 5A	24V	110Ω.....	£2.99

MINIATURE DPDT 10A RELAY a compact relay which has the switching capability of 10A 250V AC or 30V DC with double pole contacts. Design features include guided contacts, separate arcing chambers, low power consumption and 4KV- 8mm isolation between coil and contacts. Approvals include:- VDE, BEAB, UL, CSA, SEV, NF-USE, SETI, IMQ, SEMKO and DEMKO.



Technical Specification

Contact Rating 10A at 250V AC/30V DC
 Contact Arrangement Double pole changeover
 Contact Material AgSnO₂
 Operate/Release time 10ms/7ms
 Coil Operating Range 70-150%
 Coil Consumption 500mW
 Temperature Range -20°C to +70°C

CODE	TYPE	Coil	Resistance	PRICE
660-030	Mini Relay DPDT 10A	6V	75 Ω.....	£6.99
660-035	Mini Relay DPDT 10A	12V	300 Ω.....	£6.99
660-040	Mini Relay DPDT 10A	24V	1200 Ω.....	£6.99
SKT710	PCB Relay Socket.....			£1.45

MINIATURE RELAY SPDT16A A low cost vertical PCB or socket mounting general purpose DC relay with SPCO contacts rated 16A 250V AC, with 5kV insulation and 8mm creepage and clearance. Industry standard 5.0mm pitch pinning and silver alloy contacts.



Technical Specification

Contact rating 16A @ 250V DC
 Contact arrangement Single pole changeover
 Contact material Ag alloy
 Operate/release time 15ms/8ms
 Coil consumption 540mW
 Temperature range -30° to +55°C

CODE	TYPE	Coil	Resistance	PRICE
660-220	Miniature Relay SPDT 16A	12V	270Ω.....	£3.50
660-222	Miniature Relay SPDT 16A	24V	1100Ω.....	£3.50

**FREE PARKING FOR 2 HOURS
 OUTSIDE OF OUR SHOP
 SHOP HOURS 9 - 5.30
 MONDAY - SATURDAY**

POWER RELAYS

MINIATURE PLUG-IN POWER RELAY an industry standard range of miniature 4 pole changeover relays which feature a manual test button and mechanical flag indication.



Technical Specification

Contact Rating 5A at 250V ac
 Contact Arrangement 4 pole changeover
 Contact Material Silver nickel
 Operate/Release Time 20ms
 Coil Operating Range 80-110%
 Temperature Range -40°C to +70°C

CODE	TYPE	Coil	Resistance	PRICE
MR-305	Mini Relay 4PCO 5A	12V	160 Ω.....	£8.99
MR-310	Mini Relay 4PCO 5A	24V	640 Ω.....	£8.99
22-1312	Mini Relay 4PCO 5A	24V AC	190 Ω.....	£9.99
22-1345	Mini Relay 4PCO 5A	24V.....		£9.99
SKT400	PCB Relay Socket.....			£1.99
SKT405	Chassis Mounting Relay Socket.....			£1.99
22-0788	DIN Rail/Surface Relay Socket.....			£5.99

2PCO 5A POWER RELAY 2 pole changeover power relays designed for PCB terminal, solder lug terminal or with the rail/surface relay safe separation sockets (coil terminals on one side, c/o terminals on the other) available separately. All are black, with fingerproof screw clamp terminals. Featuring high response time, high reliability, long life, low coil power consumption, high level of vibration and shock resistance. Suitable for vending machines, cooking appliances and control equipment. Switching current 5A and CE approved.



Technical Specification

Nominal load 2P: contact capacity 5A at 250V AC
 AC contact capacity 5A at 30V DC
 Rated carrying current: 5A
 Max. allowable current: 5A
 Max. allowable voltage: 250V AC, 110V DC
 Max. allowable power force: 600VA, 150W
 Min. switching load: 10V DC, 10mA
 Contact material: Ag Alloy
 Contact form: DPDT, DPST
 Contact resistance: 100mΩ max. at 1A, 6V DC
 Operate time: 25ms max.
 Release time: 25ms max.
 Dielectric strength: coil and contact 1.500V AC at 50/60Hz for one minute
 between contacts 1.000V AC at 50/60Hz for one minute
 Surge resistance: 3.000V (between coil and contact 1.2 x 50µsec.
 Insulation resistance: 100MΩ min at 500V DC
 Temperature range: -25°C to +55°C
 Humidity range: 45-85% RH

CODE	TYPE	PRICE
22-1660	Power Relay 5A 12Vdc 2PCO.....	£2.99
22-1661	Power Relay 5A 24Vdc 2PCO.....	£2.99
22-1664	Power Relay 5A 220/240V DC 2PCO.....	£2.99
22-1665	RE-2 Series Socket 2PCO.....	£2.99

SQUIRES MODEL & CRAFT TOOLS

DPDT 10A POWER RELAY double pole double throw easy to use socket type power relays. Suitable for vending machines, cooking appliances and control equipment. Also available, sockets for panel builder relays. All are black, with fingerproof screw clamp terminals. Featuring high response time, high reliability, long life, low coil power consumption, high level of vibration and shock resistance. Switching current 5 Amps and CE approved.



Technical Specification

Nominal load:	DPDT	contact capacity	10A at 220V AC
		contact capacity	10A at 24V DC
Rated carrying current:			10A
Max. allowable current:			10A
Max. allowable voltage:			220V AC, 110V DC
Max. allowable power force:			2400VA, 280W
Min. switching load:			1V DC, 10mA
Contact material:			Ag
Contact form:			DPDT
Contact resistance:			100MΩ max. at 1A, 6V DC
Operate time:			25ms max.
Release time:			25ms max.
Dielectric strength:coil and contact			1.000V AC at 50/60Hz for one minute
			between contacts 1.000V AC at 50/60Hz for one minute
Surge resistance:			3.000V (between coil and contact 1.2 x 50μSec.
Insulation resistance:			100MΩ min at 500V DC
Temperature range:			-10°C to +40°C
Humidity range:			35-85% RH
Weight:			85g

CODE	TYPE	PRICE
22-1672	Power Relay 10A 12V DC DPDT.....	£4.99
22-1673	Power Relay 10A 24V DC DPDT.....	£4.99
22-1674	Power Relay 10A 24V AC DPDT.....	£4.99
22-1675	Power Relay 10A 110/120V AC DPDT.....	£4.99
22-1676	Power Relay 10A 220/240V AC DPDT.....	£4.99
22-1677	RK-2P Series Socket DPDT.....	£3.99

3PDT 10A POWER RELAY a series of 3-pole double throw power relays. These relays are designed for use with the rail/surface relay safe separation sockets (coil terminals on one side, c/o terminals on the other) available separately. Also available, sockets for panel builder relays. Available only in black, with fingerproof screw clamp terminals. Featuring high response time, high reliability, long life, low coil power consumption, high level of vibration and shock resistance. Suitable for vending machines, cooking appliances and control equipment. Switching current 10 Amps and CE approved.



Technical Specification

Nominal load:	3PDT	contact capacity	10A at 220V AC
		contact capacity	10A at 24V DC
Rated carrying current:			10A
Max. allowable current:			10A
Max. allowable voltage:			220V AC, 110V DC
Max. allowable power force:			2400VA, 280W
Min. switching load:			10V DC, 10mA
Contact material:			Ag
Contact form:			3PDT
Contact resistance:			100mΩ max. at 1A, 6V DC
Operate time:			25ms max.
Release time:			25ms max.
Dielectric strength: coil and contact			1.000V AC at 50/60Hz for one minute
			between contacts 1.000V AC at 50/60Hz for one minute
Surge resistance:			3.000V (between coil and contact 1.2 x 50μSec.
Insulation resistance:			100MΩ min at 500V DC
Temperature range:			-10°C to +40°C Humidity range 35 - 85% RH
Weight:			85g

CODE	TYPE	PRICE
22-1678	Power Relay 10A 12V DC 3PDT.....	£5.99
22-1679	Power Relay 10A 24V DC 3PDT.....	£5.99
22-1682	Power Relay 10A 220/240V AC 3PDT.....	£5.99
22-1683	RK-3P Series Socket 3PDT.....	£3.99

PRODUCT CODES

**PLEASE NOTE
IT IS VERY IMPORTANT
TO USE THE CORRECT
PRODUCT CODE
FOR THE ITEMS YOU
WISH TO ORDER**

**IT IS VITAL TO INCLUDE
THE PUNCTUATION IN THE CODE
AND TO FORMAT THE CODE
AS SHOWN IN THE CATALOGUE**

EXHIBITION SALES STAND

**WE AIM TO EXHIBIT AS WIDE
A RANGE AS POSSIBLE AT SHOWS,
BUT DUE TO SPACE RESTRICTIONS
WE ARE NOT ABLE TO FEATURE
EVERY PRODUCT. IF YOU
CONTACT US A FEW DAYS
PRIOR TO AN EVENT WE WILL
TRY TO ENSURE A PRODUCTS
AVAILABILITY AT THAT SHOW.**

SQUIRES ELECTRONIC COMPONENTS

4PCO 5A POWER RELAY a series of 4-pole changeover power relays. These relays are designed for PCB terminal, solder lug terminal or with the rail/surface relay safe separation sockets (coil terminals on one side, c/o terminals on the other) available separately. All are black, with fingerproof screw clamp terminals. Featuring high response time, high reliability, long life, low coil power consumption, high level of vibration and shock resistance. Suitable for vending machines, cooking appliances and control equipment. Switching current 5 Amps and CE approved.



Technical Specification

Nominal load 4P:	contact capacity	5A at 250V AC
	contact capacity	5A at 30V DC
Rated carrying current:	5A	
Max. allowable current:	5A	
Max. allowable voltage:	250V AC, 110V DC	
Max. allowable power force:	600VA, 150W	
Min. switching load:	10V DC, 10mA	
Contact material:	Ag Alloy	
Contact form:	DPDT, DPST, FPDT, FPST	
Contact resistance:	100mΩ max. at 1A, 6V DC	
Operate time:	25ms max.	
Release time:	25ms max.	
Dielectric strength:	coil and contact	1.500V AC at 50/60Hz for one minute
	between contacts	1.000V AC at 50/60Hz for one minute
Surge resistance:	3.000V (between coil and contact 1.2 x 50µsec.	
Insulation resistance:	100MΩ min at 500V DC	
Temperature range:	-25°C to +55°C	
Humidity range:	45-85% RH	
Weight:	35g	

CODE	TYPE	PRICE
22-1666	Power Relay 5A 12V DC 4PCO.....	£2.99
22-1667	Power Relay 5A 24V DC 4PCO.....	£2.99
22-1669	Power Relay 5A 110/120V AC 4PCO.....	£3.99
22-1670	Power Relay 5A 220/240V DC 4PCO.....	£3.99
22-1671	RE-4 Series Socket 4PCO.....	£3.99

double pole change over power relays. The relays incorporate a manual test button and mechanical flag contact operating indicator. Housed in a flame retardant cover. approvals include:- BSI, VDE, CSA, UL, BEAB, IMQ, SETI, SEMKO, DEMKO and SEV.

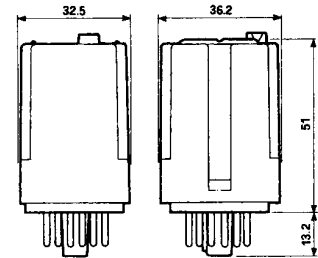


Technical Specification

Contact Rating (Resistive)	10A 250V AC/30V DC
Contact Rating (Inductive)	3A 250V AC/5A 24V DC
Max Switching Cap.	2500VA
Contact Arrangement	Double pole changeover
Max Switching Current	20A
Max Switching Voltage	380V AC
Contact Material	Silver nickel (90/10%)
Operate/Release Time	20ms max
Coil Operating Range	80-110%
Temperature Range	-40°C to +70°C

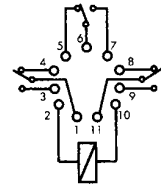
CODE	TYPE	Coil	Resistance	PRICE
660-060	Octal Relay DPCO	12V dc	111 Ω.....	£10.99
660-061	Octal Relay DPCO	24V dc	443 Ω.....	£11.99
660-062	Octal Relay DPCO	24V dc	74 Ω.....	£10.99
660-065	Octal Relay DPCO	230Vac	7900 Ω.....	£11.99
660-075	Octal Relay Socket Finger Proof.....			£3.99

PLUG-IN 3PDT POWER RELAY a range of 11 pin three pole double pole change over power relays. The relays incorporate a manual test button and mechanical flag contact operating indicator. Housed in a flame retardant cover. approvals include:- BSI, VDE, CSA, UL, BEAB, IMQ, SETI, SEMKO, DEMKO and SEV.



Technical Specification

Contact Rating (Resistive)	10A 250V AC/30V DC
Contact Rating (Inductive)	3A 250V AC/5A 24V DC
Max Switching Cap.	2500VA
Contact Arrangement	Three pole changeover
Max Switching Current	20A
Max Switching Voltage	380V AC
Contact Material	Silver nickel (90/10%)
Dielectric Strength	2000V rms
Operate/Release Time	20ms max
Coil Operating Range	80-110%
Temperature Range	-40°C to +70°C



CODE	TYPE	Coil	Resistance	PRICE
660-080	11 Pin Relay 3PCO	12V dc	111 Ω.....	£11.99
660-081	11 Pin Relay 3PCO	12V dc	443 Ω.....	£11.99
660-082	11 Pin Relay 3PCO	12V dc	74 Ω.....	£11.99
660-085	11 Pin Relay 3PCO	230Vac	7900 Ω.....	£12.99
660-095	11 Pin Relay Socket Finger Proof.....			£3.99

AUTOMOTIVE RELAYS

30A AUTOMOTIVE RELAY these relays, available with 12V and 24V coils, have been especially designed for automotive use. Their heavy duty construction enables them to switch the heavier loads required in vehicular applications. Suitable for use in the control of car alarms, central locking, indicators and lighting. PCB mounting epoxy resin sealed type suitable for PCB washing. Designed for extreme temperature ranges with a maximum 30A rated current. Form C SPDT contact.



Technical Specification

Contact resistance:	100mΩ max.
Power consumption:	1.59W
Contact arrangement:	SPDT
Contact material:	FE130
Operate/release time:	10ms max.
Pull in voltage:	70% max.
Drop out voltage:	5% min.
Insulation resistance:	100MΩ min. at 500V DC
Dielectric strength:	Between coil and contact 750V AC 1 mins.
	Between contacts 1200V AC for 1 mins.
Life expectancy:	Mechanical 107 operations
	Electrical 105 operations
Temperature range:	-40°C to +85°C
Dimensions:	26 x 21 x 21mm

CODE	TYPE	PRICE
22-0369	12V 30A Automotive Relay.....	£2.70
22-0370	24V 30A Automotive Relay.....	£3.40