

422-710

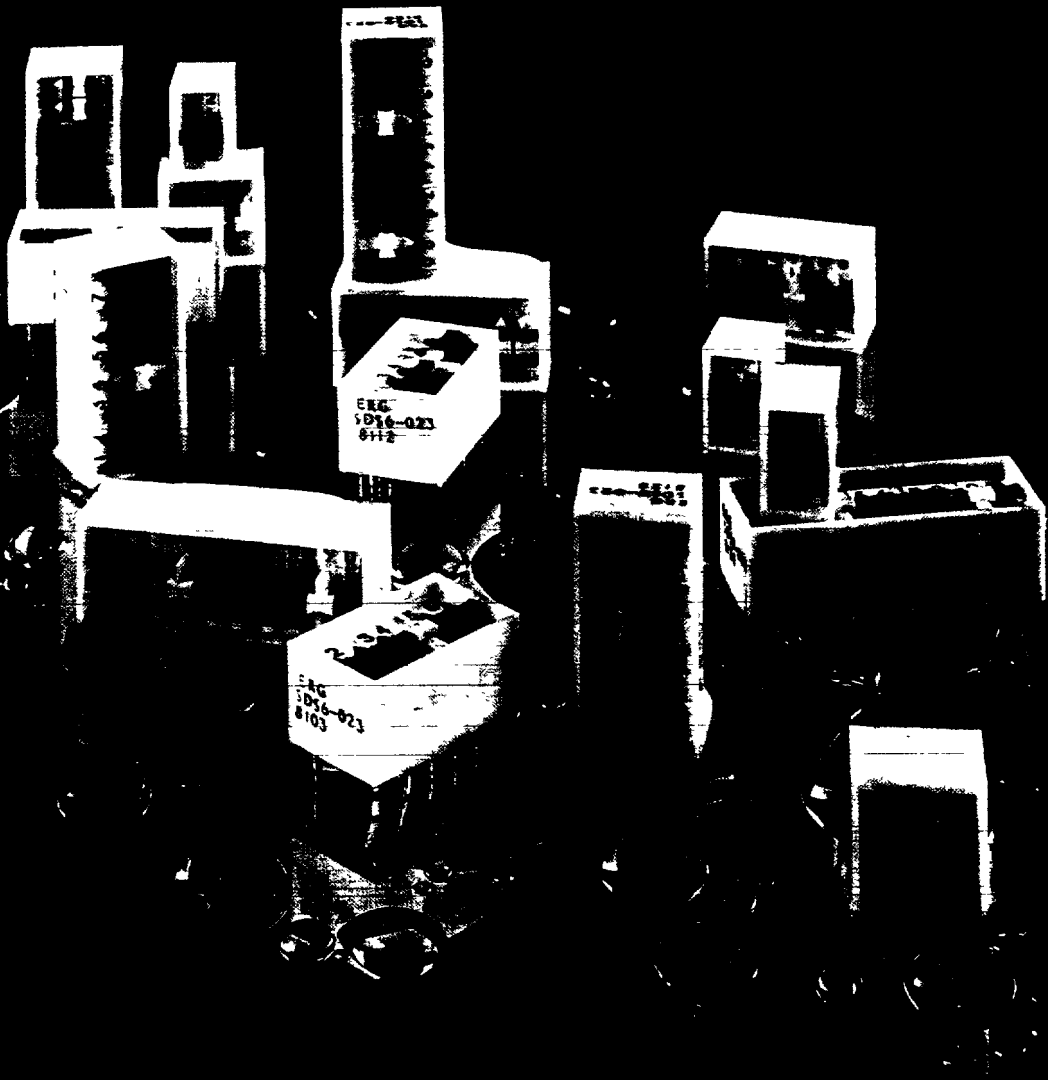
897

Erg Components

SWITCHES, REED RELAYS & RESISTORS

SpectraDIL® Switch

-023 Series basic models



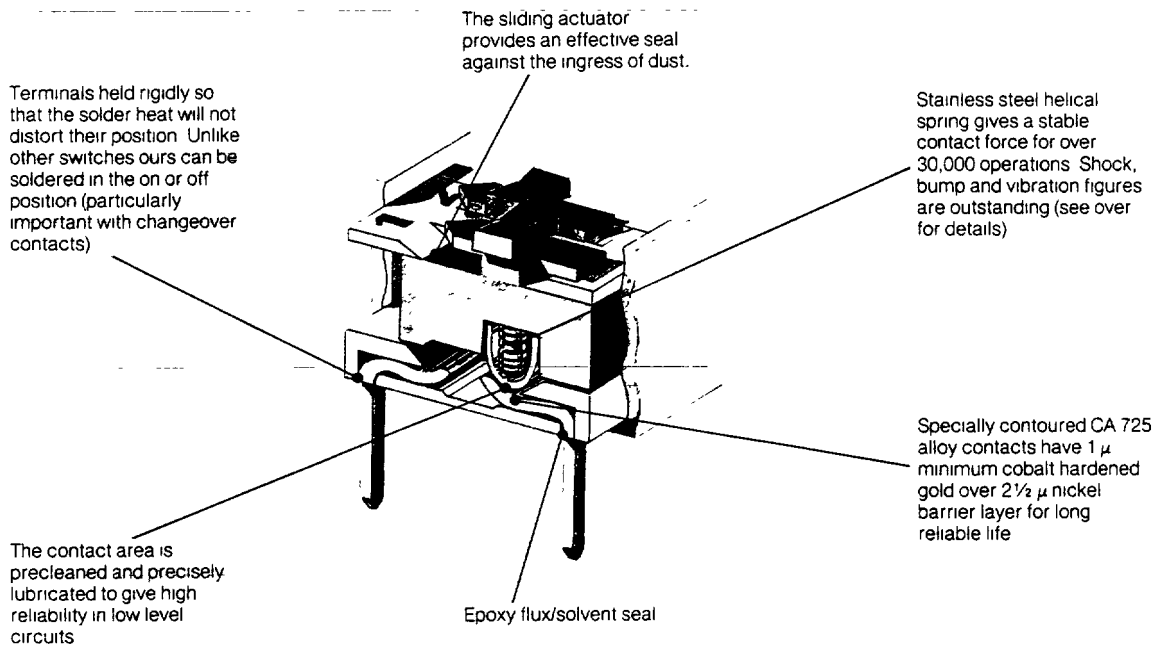
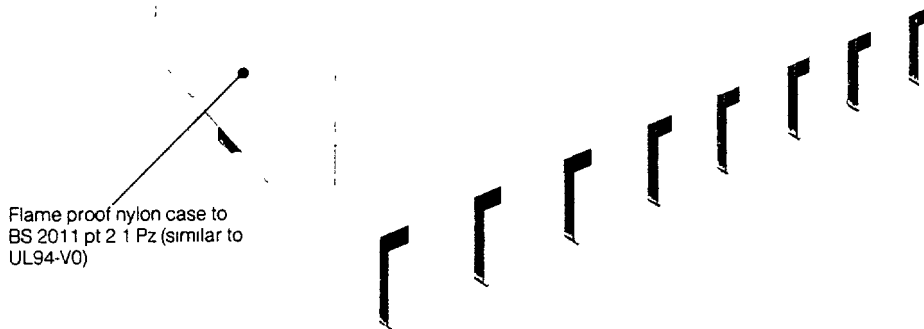
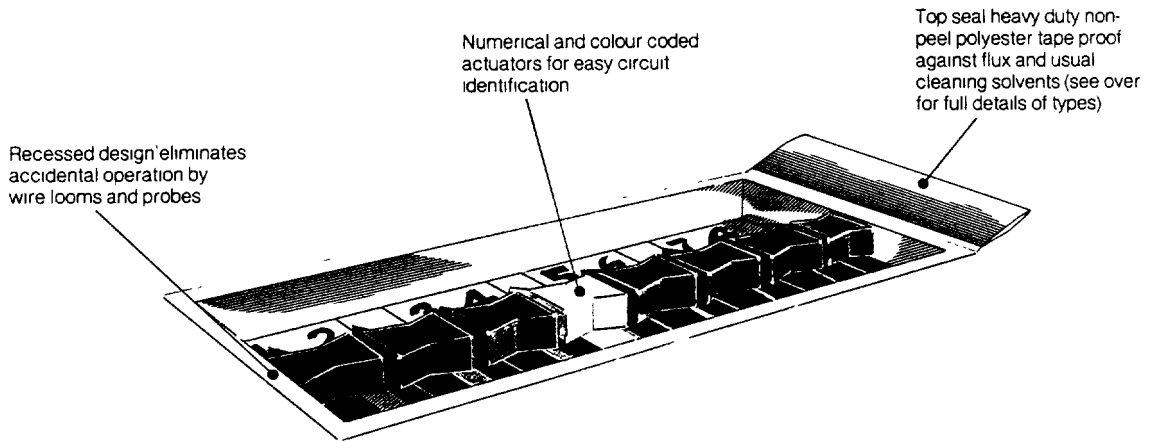
- * **Designed for flow soldering and solvent cleaning.**
- * **Reliably switches from 1μV, 1μA up to 10VA.**
- * **25 standard stock models.**
- * **Life time guarantee.**

Erg Industrial Corporation Ltd, Luton Road, Dunstable, Bedfordshire LU5 4LJ England

☎ 0582 - 62241 ☎ 82349

SpectraDIL® 023 All you want in a DILSwitch® and a bit more.

Purpose designed for flow soldering and solvent cleaning - the top seal is factory applied and is easily removed after flow soldering. This new generation is designed to meet draft BS 9565 and exceeds the requirements of MIL-S-83504. Take a look at these unique features.



Specify with confidence, Erg Components back up these switches with a **lifetime guarantee**. Please ask for a **FREE** sample of any models you are interested in.

World wide patents and patents pending.

Single Throws

SDS2-023
7mm long
£0 28

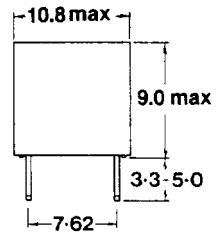
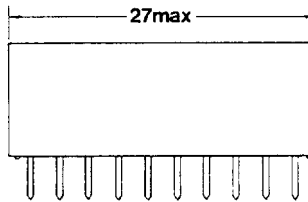
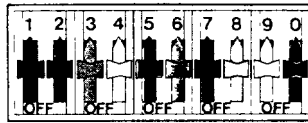
SDS4-023
12mm long
£0 50

SDS6-023
17mm long
£0 72

SDS8-023
22mm long
£0 92

SDS10-023
27mm long
£1 07

Arrow forward moves pole to "on" position



Changeovers (p.c.b. linked)

SDC1-023
7mm long
£0 31

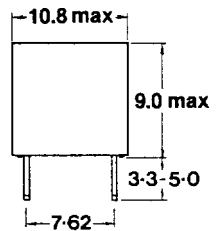
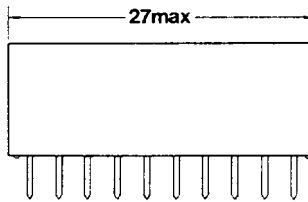
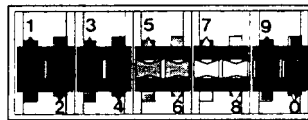
SDC2-023
12mm long
£0 55

SDC3-023
17mm long
£0 79

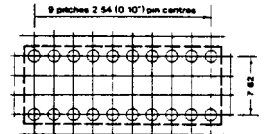
SDC4-023
22mm long
£1 01

SDC5-023
27mm long
£1 18

"On" pole shown by arrows nearest edge of switch



Drilling matrix for p.c.b. (all models)



Ganged

SDD1-023
7mm long
£0.31

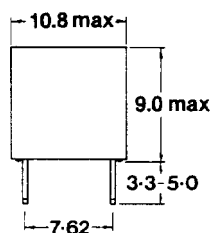
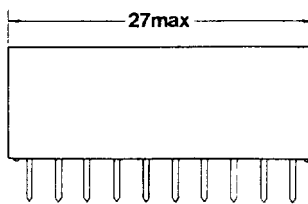
SDD2-023
12mm long
£0 55

SDD3-023
17mm long
£0 79

SDD4-023
22mm long
£1 01

SDD5-023
27mm long
£1 18

Arrow forward moves poles to "on"



Optional push fit dust covers available



Electrical and Performance Data at 20°C, 70% R.H

Contact Ratings

Non Switching	100Vac, 5A
Switching	1 μ V to 100V, 1 μ A to 1A up to 10VA

Initial Contact Resistance

(at 10mV, 10mA max)

Typical	10m Ω
Max	20m Ω

Insulation Resistance

at 500 Vdc Min

	100G Ω
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Life Typical (within rated load) test reports available

	30,000 make/breaks
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Dielectric Strength

1 minute

	500V r m s 50 Hz
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Capacitance between open contacts

	< 1pf
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Temperature Range

Storage, electrical use and manual operation

	-55°C to + 100°C
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Operating Force

Per Pole or Wiper
-Typical

	400 grams
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Humidity BS 2011

Test Ca	56 days
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Bump BS 2011 Test Eb

No contact interruptions > 1 μ s during 4000 bumps at 390m/s ² (40g)

Acceleration BS 2011

Test Ga	No contact interruptions > 1 μ s during test at 980 m/s ² (100g)
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Vibration BS2011 Test

10 to 2000 Hz
No contact interruptions > 1 μ s during test at 147 m/s ² (15g) or 1 0mm displacement amplitude

Shock BS 2011 Test Ea

980 m/s ² (100g)
No contact interruptions > 1 μ s during test

Soldering Solderability

< 2 seconds to wet at 230°C as per IEC 68 and BS 2011 Test T solder bath method

Resistance to Soldering heat

as per IEC 68 and BS 2011 10 seconds satisfactory at 260°C when mounted on 1.5mm p c b
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The base of the switch is fully sealed and the top is sealed with a special polyester tape that should only be removed after flow soldering and solvent cleaning. Once removed the tape cannot be reapplied to provide a good seal.

We have carried out tests using various manufacturers' solvents for 5 minutes total immersion which is more severe than can be expected in practice (some ultrasonically 40 KHz pulsed at 100Hz - see below) and found **no deterioration** of the integrity of the seal or of the plastic/metal subcomponents and seals.

System Type - 1,1,1 -trichloroethane (stabilised)

Examples tried.
Chlorothene VG, Genklene LV - hot (71-81°C), cold + ultrasonics

System Type - 1,1,2 - trichloro-1,2,2 -trifluoroethane/ethanol azeotrope)

Examples tried
Flourisol E, Freon TE, Arklone A - cold

System Type - 1,1,2 - trichloro-1,2,2 -trifluoroethane/isopropanol azeotrope)

Examples tried
Arklone L - hot (48°C), cold + ultrasonics

System Type - Trichloroethylene

Examples tried
Triklone N - hot (87°C)

We have also carried out flux tests using both water based (SG 0 945) and isopropyl alcohol based (SG 0 825) resin (colophony) fluxes, for five minutes **total immersion**, and easily met BS 9565 test requirements of <5 m Ω change in contact resistance and <10% change in operating force.

Distributors

The following distributors stock the most popular items from our switch range for same day dispatch and they also have full access to our in depth factory stock of over 100,000 switches covering every model.

Farnell Electronic Components Ltd.

Telephone Leeds (0532) 636311
Telex 55147

Hitak Distribution Ltd.

Telephone 0954 81996
Telex 817347

Intel Electronics Ltd.

Telephone Hitchin (0462) 812505
Telex 825637

A.M. Lock & Co. Ltd.

Telephone Oldham 061-652 0431
Telex 669971

Semiconductor Supplies International Ltd.

Telephone 01-643 1126
Telex 946650

VSI Electronics (U.K.) Ltd.

Telephone Harlow (0279) 29666
Telex 81387

This data is believed to contain the best information available at the time of printing, but is subject to change without notice. Performance figures where quoted are usually estimates based on our experience or that of our suppliers. Customise this study yourselves.


Erg Components
SWITCHES REED RELAYS & RESISTORS

In common with all components, reliability varies with many factors and users are invited to contact us in appropriate cases so that where relevant, information is available, may be considered by the user. All supplies are subject to the Company's standard conditions of sale, which are available on request.

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