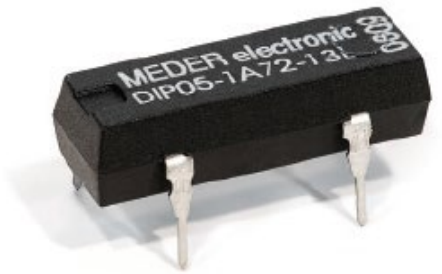
DIP Series Reed Relays

- **Features: Dual In-Line IC Compatible Relay, Available with Dielectric Strength 4.25VDC**
- **Applications: General Purpose, Measuring and Testing Devices & Others**
- **Markets: Telecommunications, Test and Measurement, Security & Others**



Part Description: DIP00-0X00-00X

Nominal Voltage	Contact Quantity & Contact Form	Switch Model	Pin Out	Option ( ) Version with Magnetic Shield
05, 12, 15, 24	1A, 1B, 1C, 2A	72, 75, 90	10, 11, 12, 13, 19, 21, 51	A, B, C, L(M), D(Q), E(R), F(S)

See page 3 for explanation of pin outs and options

Customer Options	Switch Model			Unit
Contact Data (@ 20°C)	72 (A-Dry)	75 (A-Dry)	90 (C-Dry)	
Contact Material	Rhodium	Rhodium	Rhodium	
Rated Power (max.) Any DC combination of V&A not to exceed max. rated power	10	10	10	W
Switching Voltage (max.) DC or peak AC	200	500	175	V
Switching Current (max.) DC or peak AC	0.5	0.5	0.5	A
Carry Current (max.) DC or peak AC	1.0	1.0	1.0	A
Contact Resistance (max.) @ 0.5V & 10mA, Measured with 40% Pull-In Overdrive	10	200	150	mOhm
Breakdown Voltage (min.) According to EN60255-27	0.25	0.6	0.2	kVDC
Operating Time (max.) Including Bouncing, Measured with 40% Pull-In Overdrive	0.5	0.5	0.7	ms
Release Time (max.) Measured without Coil Suppression	0.1	0.1	1.5	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{10}	10^{10}	10^{10}	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.3	0.4	1.0	pF

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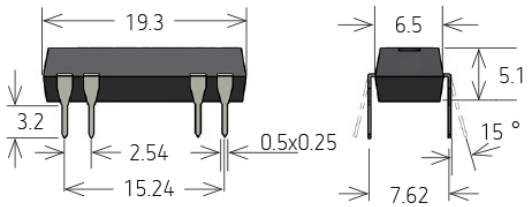
DIP Series Reed Relays

Coil Data (at 20°C)			Coil Voltage (VDC)		Coil Resistance (Ohm)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Coil Power (mW)
Contact Form	Switch Model	Pin Out	Nominal	Max.	Typical (± 10 %)	Max.	Min.	Nominal
1A	72, 75	10, 11, 12, 13	5	7.5	500 (200)	3.5	0.75	50
			12	16	1,000	8.4	1.8	145
			15	20	2,000	10.5	2.2	115
			24	30	2,000	16.8	3.6	290
1B*	72, 75**	19	5	7.5	500 (200)	3.5	0.75	50
			12	16	1,000	8.4	1.8	145
			15	20	2,000	10.5	2.2	115
			24	30	2,000	16.8	3.6	290
1C	90	51	5	7.5	200	3.5	0.75	125
			12	16	500	8.4	1.8	290
			15	20	2,000	10.5	2.2	115
			24	30	2,000	16.8	3.6	290
2A	72	21	5	7.5	200	3.5	0.75	125
			12	16	500	8.4	1.8	290
			15	20	2,000	10.5	2.2	115
			24	30	2,000	16.8	3.6	290
1A-HR	72	12, 13	5	7.5	1,000	3.5	0.75	25
			12	16	2,000	8.4	1.8	72
1C-HR	90	50	12	16	2,000	8.4	1.8	144

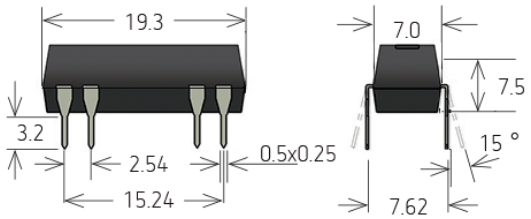
The Pull-In, Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °K
The figures in parentheses ( )are valid for switch model 75
HR = High Resistance Coil
* Re-closure of Form B may occur when the max. coil voltage is exceeded. Coil polarity on Form B must be observed. Pin 2 is positive.
** Version 1B75 only with 24V Coil available.

Dimensions (in mm [inch]) Tolerances acc. to ISO 2768-m

Low Profile



High Profile



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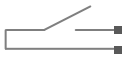
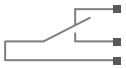
DIP Series Reed Relays

Relay Data (@ 20°C)		Unit
Dielectric Strength Coil/Contact (min.) According to EN60255-27	1.5 (4.25 by 73L)	kVDC
Insulation Resistance Coil/Contact (min./typ.) 1/2 sine wave, 6md, 3-axis	$10^{10}/10^{11}$	Ohm
Capacitance Coil/Contact (typ.) @10 kHZ	1.2	pF
Shock Resistance (max.) 1/2 sine wave, 6md, 3-axis	50	g
Vibration Resistance (max.) 10 – 2,000 Hz	20	g
Operating Temperature (max.) Surrounding of the relay's housing	-20 to 70	°C
Storage Temperature (max.) Surrounding of the relay's housing	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability Aqueous rinse suitable. Proper drying necessary.	Fully Sealed	

Handling & Assembly Instructions

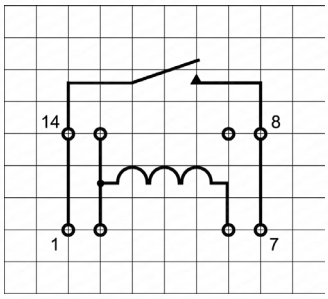
- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used - see our website.
- External magnetic fields and magnetic effects, due to adjacent relays in high density matrices that may influence the relays' electrical characteristics, must be taken into consideration.
- Mechanical shock impacts, e.g. dropping the relays, may cause immediate or post-installation failure.
- Suppressing coil diode can have a negative influence on total number of switching cycles, especially by switching high voltage
- Wave soldering: maximum 260°C / 5 seconds.

Glossary Contact Form

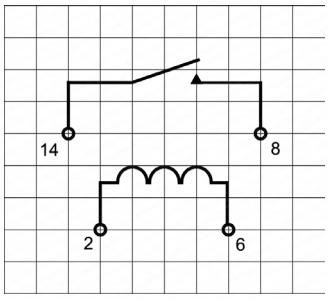
Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

Pin-Out (Top View) (2.54mm [0.10"] pitch grid)

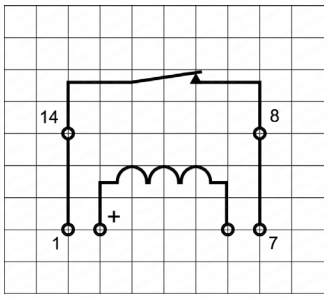
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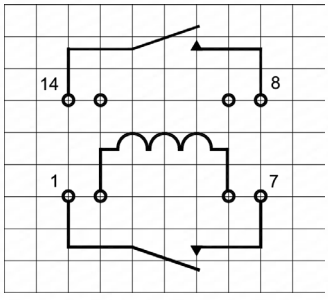
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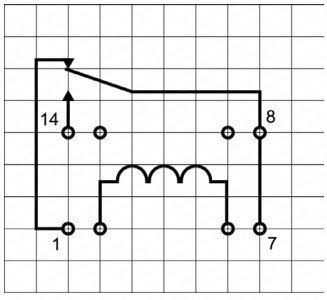
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51



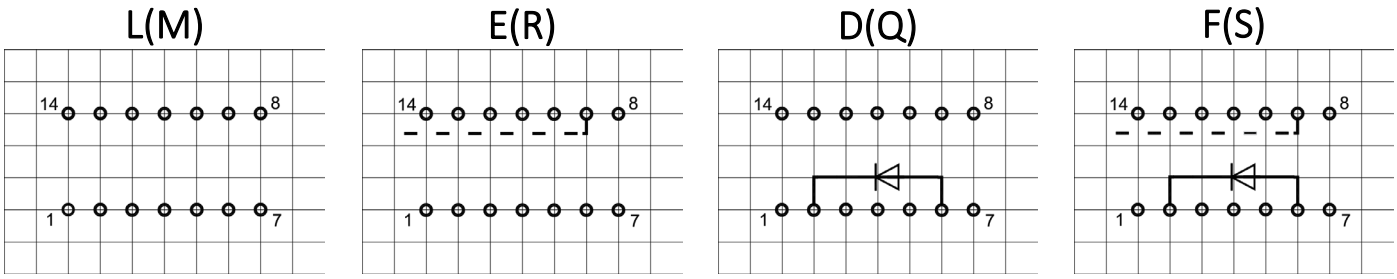
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DIP Series Reed Relays

Contact Form	Switch Model	Pin Out	Options*							
			L	D	M	Q	E	R	F	S
1A	Low Profile	12	X							
		13	X							
	High Profile	12		X	X	X	X	X	X	X
		13		X	X	X				
1B	High Profile	19	X	X	X	X				
2A	High Profile	21	X	X	X	X	X	X	X	X
1C	Low Profile	51	X							
	High Profile			X	X	X	X	X	X	X

* For general information only. Please ask your nearest sales office for a current availability of the particular option.

Options ( ) Versions with magnetic shield (Top View) (2.54mm [0.10“] pitch grid)



Please note: All technical specifications on this series datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

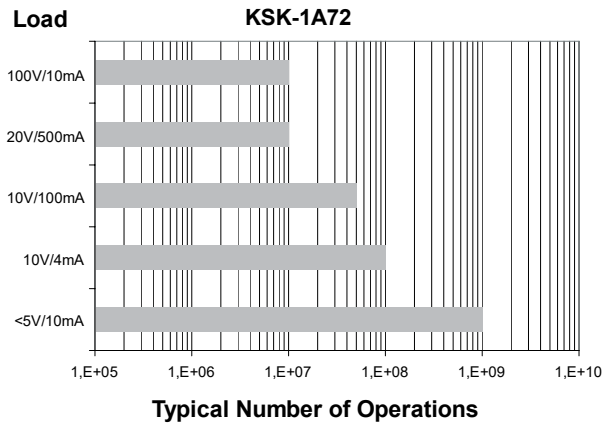
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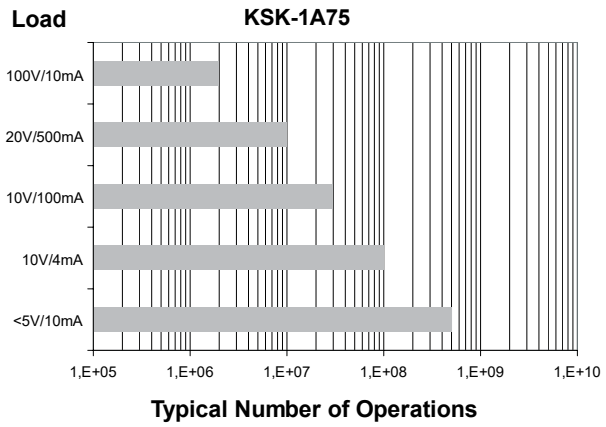
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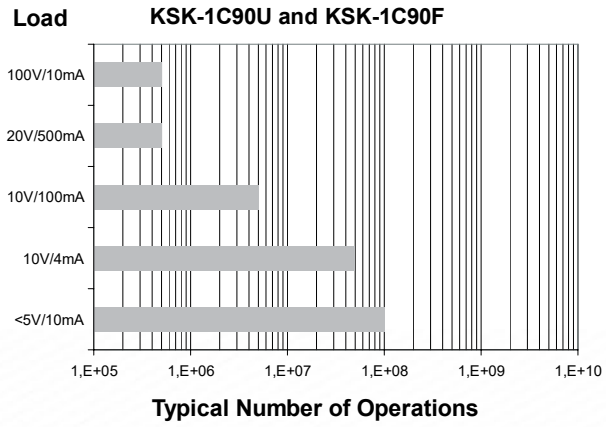
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DIP Series Reed Relays

Life Test Data (*Load increase reduces life expectancy of Reed Switches)







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