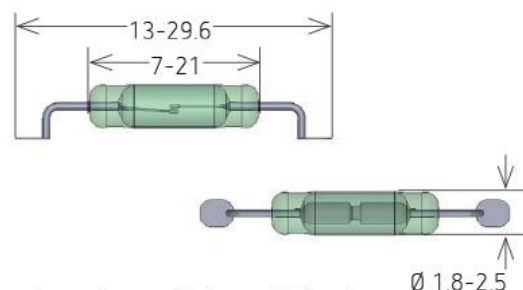


MK23 Series Reed Switches

- **Features:** Miniature, Close Differential, Long Life Expectancy
- **Applications:** Air Conditioning, Gas Metering, Barcode Scanner, Security Panel, Water Flow Gauge & Others
- **Markets:** Automotive, Telecommunication, Security, Test & Measurement, Household, Medical & Others



Values depend on switch model (xxx)

Part Description:

M K 2 3 - 0 0 - X - 0

Switch Model	Magnetic Sensitivity	Lead Design
35, 46, 52, 66, 80, 85, 87, 90, 501	B, C, D, E, F, G	1, 2, 4, Helix

Customer Options	Switch Model									Unit
Contact Data	35	46	52	66	80	85	87	90	501	
Lead Design	1, 2, 4	4	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	Helix	
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	20	10	50	10	10	100	10	10	10	W
Switching Voltage (max.) DC or peak AC	200	200	350	180	170	1000	200	175	200	V
Switching Current (max.) DC or peak AC	1.0	0.5	0.5	0.5	0.5	1.0	0.4	0.5	0.5	A
Carry Current (max.) DC or peak AC	1.25	1.0	2.5	1.0	0.5	2.5	0.5	1.0	1.0	A
Contact Resistance (max.) @ 0.5V & 50mA	150	150	150	150	200	150	150	150	100	mOhm
Breakdown Voltage (min.) According to EN60255-5	0.22	0.2	0.5	0.2	0.21	1.5	0.23	0.2	0.25	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	0.5	0.5	1.1	0.5	0.6	1.1	0.6	0.7	0.5	ms
Release Time (max.) Measured with no Coil Excitation	0.1	0.05	0.1	0.05	0.05	0.05	0.05	1.5	0.1	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10 ¹²	10 ⁹	10 ¹⁰	10 ¹⁰	10 ⁹	10 ¹⁰	10 ⁹	10 ⁹	10 ¹⁰	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.3	0.3	0.5	0.3	0.4	0.5	0.2	1.5	0.3	pF

MK23 Series Reed Switches

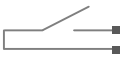
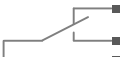
Dimensions (mm) and Lead Specifications

Overall Length	13.0 – 29.6
Glass Length	7.0 – 21.0
Glass Dia.	1.8 – 2.75
Lead Dia.	0.3 – 0.6
Lead Design 1	Flat, straight leads for PCB slot mounting
Lead Design 2	Flat, bent SMD leads (Gull-wing)
Lead Design 4	Round, bent SMD leads for PCB slot mount

Environmental Data

		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	30	g
Vibration Resistance (max.)	20	g
Operating Temperature	-40 to 130	°C
Storage Temperature	-55 to 130	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

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	

Layout

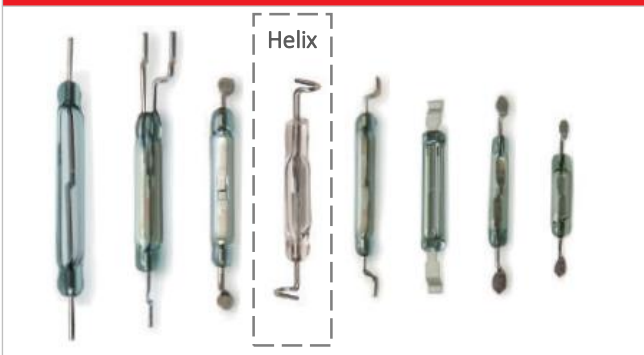
Top View



Glossary Magnetic Sensitivity

Sens.	A	B	C	D	E	F	G
AT	05-10	10-15	15-20	20-25	25-30	30-35	35-40

MK23 Reed Sensor



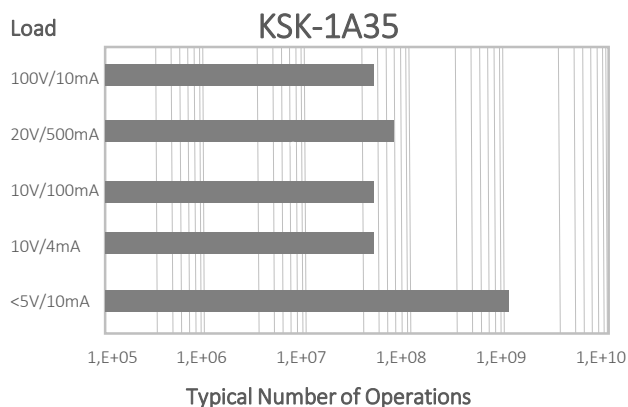
Handling & Assembly Instructions

- Use proper lead clamping or heat sinking techniques to prevent mechanical and/or heat stress during, soldering, and welding
- Mechanical shock as the result of dropping the reed sensor typically from a distance of greater than 12" may change it's magnetic sensitivity and/or destroy the sensor
- Reflow Soldering Conditions according to JEDEC norm J-STD-020D.1

MK23 Series Reed Switches

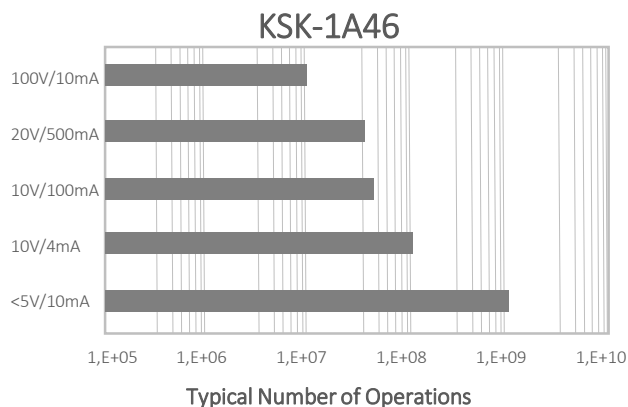
Life Test Data

*Load increase reduces life expectancy of Reed Switches



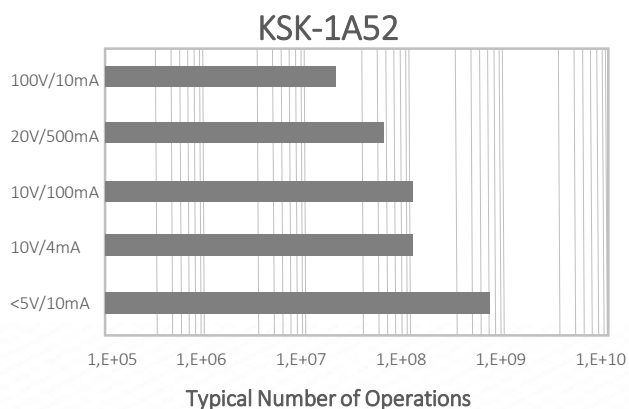
Life Test Data

*Load increase reduces life expectancy of Reed Switches



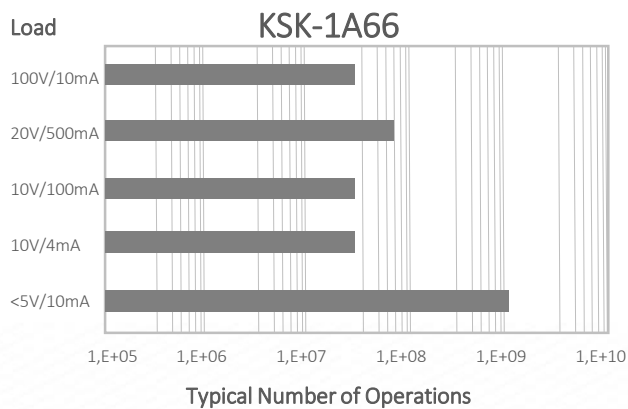
Life Test Data

*Load increase reduces life expectancy of Reed Switches



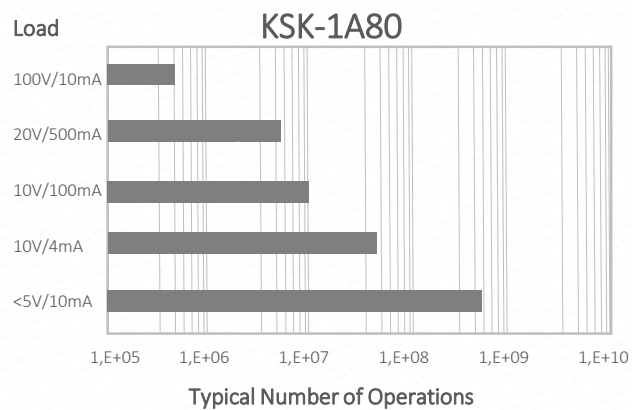
Life Test Data

*Load increase reduces life expectancy of Reed Switches



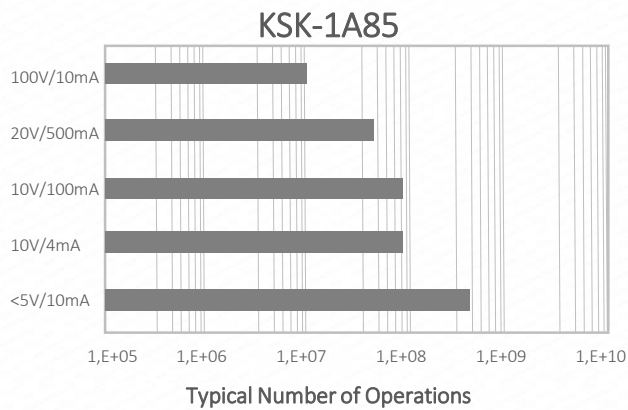
Life Test Data

*Load increase reduces life expectancy of Reed Switches



Life Test Data

*Load increase reduces life expectancy of Reed Switches

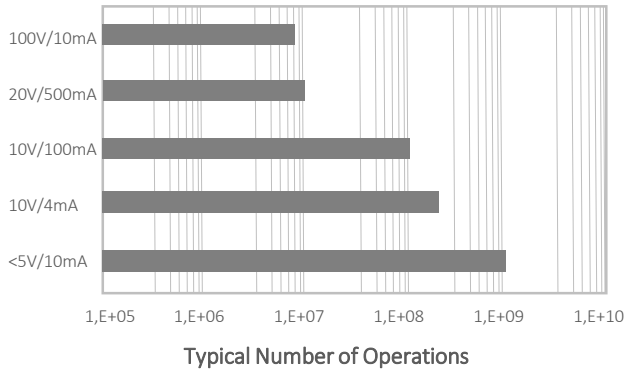


MK23 Series Reed Switches

Life Test Data

*Load increase reduces life expectancy of Reed Switches

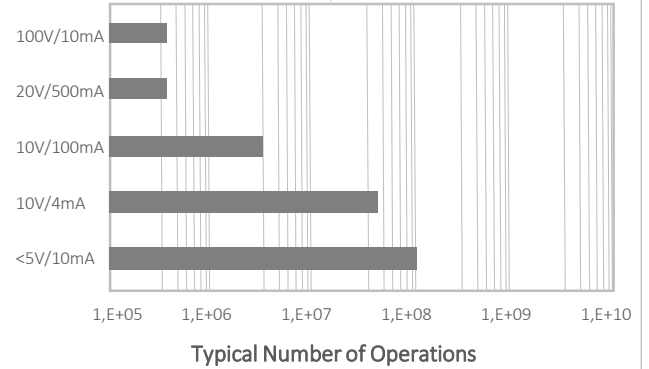
KSK-1A87



Life Test Data

*Load increase reduces life expectancy of Reed Switches

KSK-1C90U / KSK-1C90F



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.

This series datasheet could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These change will be incorporated in future revisions.

For deviating values, most current specifications and products please contact your nearest sales office.

