## DESCRIPTION

MK15 are magnetically operated Reed proximity switches for SMD mounting.

## - Lead design 1:

Flat, straight leads for PCB slot mounting.

## - Lead design 2:

Flat, bent SMD leads.
The sensors are supplied taped \& reeled according to IEC 286/part 3 suitable for auto-placement. The special features of this series are the small dimensions of only $19.5 \times 2.5 \times 2.5 \mathrm{~mm}$ and the simple internal structure (low-cost version).

## FEATURES

- Excellent for low power operations
- High power switches available
- Six operate sensitivities available
- Tape and Reel available
- No external power required for sensor operation



## APPLICATIONS

- Electronic PCB's where all components are surface mounted
- No external power required for sensor operation
- Telecommunication applications

Hook switch in mobile and hard-wired phones

- Switching element in microphones


## DIMENSIONS

All dimensions in mm [inches]


MAGNETIC SENSITIVITY

| SENSITIVITY <br> CLASS | PULL IN <br> AT RANGE |
| :---: | :---: |
| B | $10-15$ |
| C | $15-20$ |
| D | $20-25$ |
| E | $25-30$ |
| F | $30-35$ |
| G | $35-40$ |



## ORDER INFORMATION

Part Number Example
MK15-B - 1
B is the magnetic sensitivity 1 is the lead design

| SERIES | MAGNETIC <br> SENSITIVITY | LEAD <br> DESIGN |
| :---: | :---: | :---: |
| MK15 - | $\mathrm{X}-$ | X |
| OPTIONS | $\mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{F}, \mathrm{G}$ | 1,2 |

## TAPE \& REEL



## SOLDERING INFORMATION



## CONTACT DATA

| All data $20^{\circ} \mathrm{C}$ | Contact Form --> | Form A |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contact Ratings | Conditions | Min. | Typ. | Max. | Units |
| Contact Rating | Any DC combination of V \& A not to exceed their individual max.'s |  |  | 10 | W |
| Switching Voltage | DC or peak AC |  |  | 200 | V |
| Switching Current | DC or peak AC |  |  | 0.5 | A |
| Carry Current | DC or peak AC |  |  | 1.25 | A |
| Static Contact Resistance | $\mathrm{w} / 0.5 \mathrm{~V}$ \& 10 mA |  |  | 150 | $\mathrm{m} \Omega$ |
| Dynamic Contact Resistance | Measured w/ 0.5 V \& 50 mA 1.5 ms after closure |  |  | 200 | $\mathrm{m} \Omega$ |
| Insulation Resistance across Contacts | 100 Volts applied | $10^{10}$ * |  |  | $\Omega$ |
| Breakdown Voltage across Contacts | Voltage applied for 60 sec . min. | 225 * |  |  | VDC |
| Operate Time, incl. Bounce | Measured w/ 100\% overdrive |  |  | 0.5 | ms |
| Release Time | Measured w/ no coil suppression |  |  | 0.1 | ms |
| Capacitance | @ 10kHz across contact |  | 0.2 |  | pF |
| Contact Operation ** |  |  |  |  |  |
| Must Operate Condition | Steady state field | 10 |  | 30 | AT |
| Must Release Condition | Steady state field | 4 |  | 27 | AT |
| Environmental Data |  |  |  |  |  |
| Shock Resistance | $1 / 2$ sine wave duration 11 ms |  |  | 50 | g |
| Vibration Resistance | From $10-2000 \mathrm{~Hz}$ |  |  | 20 | g |
| Ambient Temperature | $10^{\circ} \mathrm{C} /$ minute max. allowable | -40 |  | 130 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | $10^{\circ} \mathrm{C} /$ minute max. allowable | -50 |  | 130 | ${ }^{\circ} \mathrm{C}$ |
| Soldering Temperature | $5 \mathrm{sec} . \mathrm{dwell}$ |  |  | 260 | ${ }^{\circ} \mathrm{C}$ |
| Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch. <br> * Insulation resistance of $10^{12}$ and breakdown voltage 480VDC is available. <br> ** These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required. |  |  |  |  |  |

