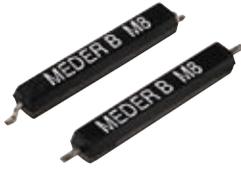


Reed Sensors for SMD Mounting



APPLICATIONS

- Electronic PCB's where all components are surface mounted
- Telecommunication applications
Hook switch in mobile and hard-wired phones
- Switching element in microphones

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.

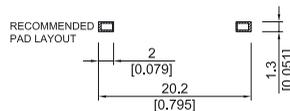
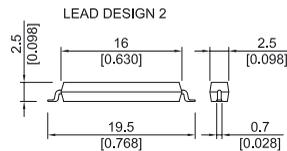
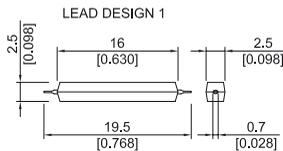
The sensors are supplied taped & reeled according to IEC 286/part 3 suitable for auto-placement. The special features of this series are the small dimensions of only 19.5 x 2.5 x 2.5mm and the simple internal structure (low-cost version).

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
- UL approved

DIMENSIONS

All dimensions in mm [inches]



MAGNETIC SENSITIVITY

| Sensitivity class | Pull In At Range |
|-------------------|------------------|
| B | 10 - 15 |
| C | 15 - 20 |
| D | 20 - 25 |
| E | 25 - 30 |
| F | 30 - 35 |
| G | 35 - 40 |

ORDER INFORMATION

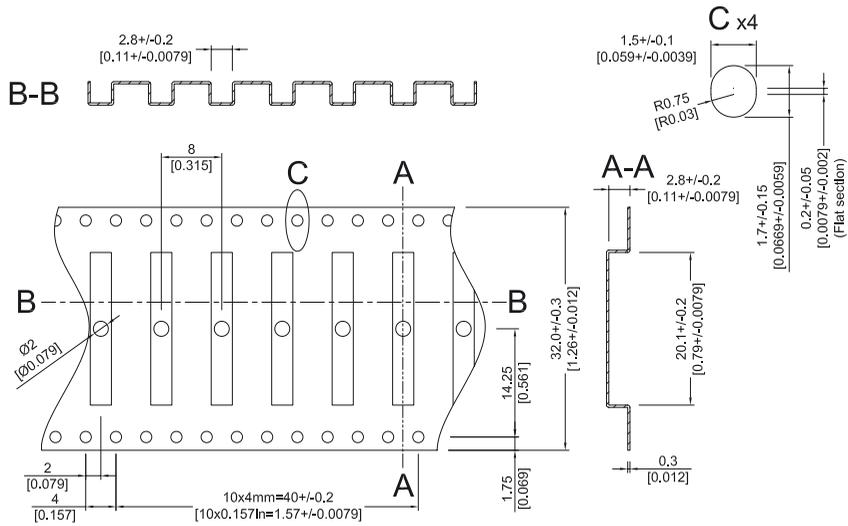
Part Number Example

MK15 - B - 1

B is the magnetic sensitivity
1 is the lead design

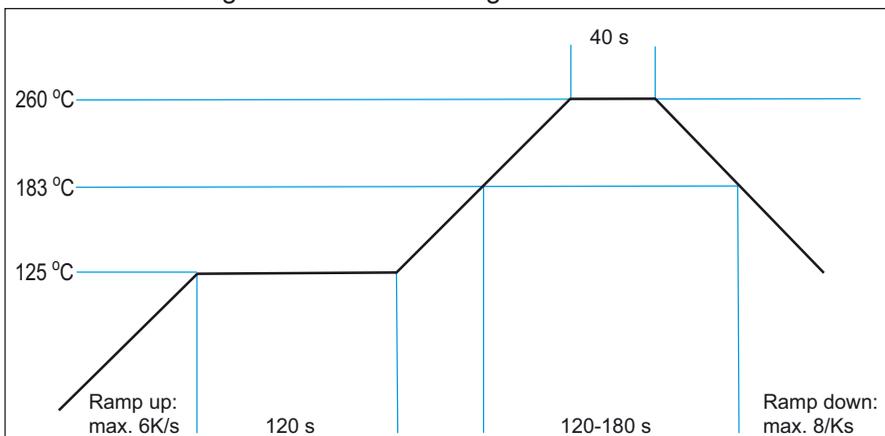
| Series | Magnetic Sensitivity | Lead Design |
|---------|----------------------|-------------|
| MK15 - | X - | X |
| Options | B, C, D, E, F, G | 1, 2 |

TAPE & REEL



SOLDERING INFORMATION

reflow soldering conditions according JEDEC norm J-STD-020C



Reed Sensors for SMD Mounting

CONTACT DATA

| All Data at 20° C | Contact Form → | Form A | | | |
|--|---|------------------|------|------|-------|
| | | Min. | Typ. | Max. | Units |
| Contact Ratings | Conditions | | | | |
| Switching Power | 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 | w/ 0.5 V & 10 mA | | | 150 | mΩ |
| Dynamic Contact Resistance | Measured w/ 0.5 V & 50 mA , 1.5 ms after closure | | | 200 | mΩ |
| Insulation Resistance across Contacts | 100 volts applied | 10 ¹² | | | Ω |
| Breakdown Voltage across Contact | Voltage applied for 60 sec. min. | 225 | | | VDC |
| Operation Time incl. Bounce | Measured w/ 100 % overdrive | | | 0.5 | ms |
| Release Time | Measured w/ no coil suppression | | | 0.1 | ms |
| Capacitance | at 10 kHz cross 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 sinus wave duration 11 ms | | | 50 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 20 | g |
| Ambient Temperature | 10°C/ minute max. allowable | -40 | | 85 | °C |
| Stock Temperature | 10°C/ minute max. allowable | -50 | | 85 | °C |
| Soldering Temperature | 5 sec. dwell | | | 260 | °C |
| Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch. * These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required. | | | | | |