Reed Sensors for SMD Mounting

DESCRIPTION

MK16 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 15.6 x 2.3 x 2.3mm and the simple internal structure (low-cost version).

FEATURES

- · Four operate sensitivities available
- Tape and Reel available
- · Excellent for low power operations
- No external power required for sensor operation

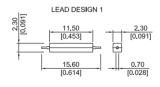


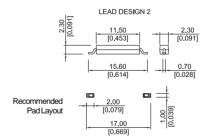
APPLICATIONS

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

DIMENSIONS

All dimensions in mm [inches]





ORDER INFORMATION

| SENSITIVITY CLASS | PULL IN AT RANGE |
|----------------------|---------------------|
| В | 10 - 15 |
| С | 15 - 20 |
| D | 20 - 25 |
| Е | 25 - 30 |

Part Number Example

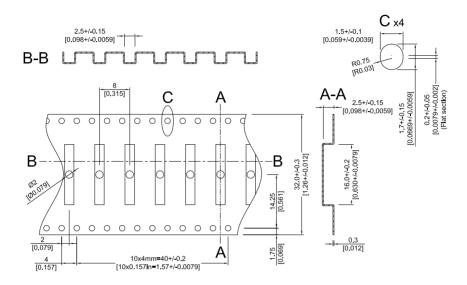
MK16 - B - 1

B is the magnetic sensitivity **1** is the lead design

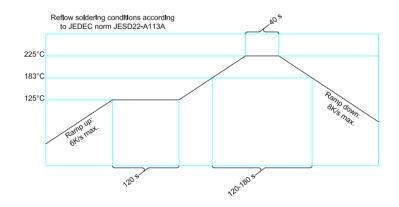
| SERIES | MAGNETIC SENSITIVITY | LEAD DESIGN |
|---------|-------------------------|----------------|
| MK16 - | X - | Х |
| OPTIONS | B, C, D, E | 1, 2 |

Reed Sensors for SMD Mounting

TAPE & REEL



SOLDERING INFORMATION



Reed Sensors for SMD Mounting

CONTACT DATA

| All data at 20 °C | Contact Form> | Form A | | | |
|---------------------------------------|---|-----------------|------|------|-------|
| Contact Ratings | Conditions | Min. | Тур. | 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 | Α |
| Carry Current | DC or peak AC | | | 0.5 | Α |
| Static Contact Resistance | w/ 0.5V & 10mA | | | 150 | mΩ |
| Dynamic Contact Resistance | Measured w/ 0.5V & 50mA 1.5 ms after closure | | | 200 | mΩ |
| Insulation Resistance across Contacts | 100 Volts applied | 10 ⁹ | | | Ω |
| Breakdown Voltage across Contacts | Voltage applied for 60 sec. min. | 230 | | | VDC |
| Operate Time, incl. Bounce | Measured w/ 100% overdrive | | | 0.6 | 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 | | 20 | AT |
| Must Release Condition | Steady state field | 04 | | 18 | AT |
| Environmental Data | | | | | |
| Shock Resistance | 1/2 sine wave duration 11ms | | | 30 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 10 | g |
| Ambient Temperature | 10 °C/ minute max. allowable | -40 | | 130 | °C |
| Storage Temperature | 10 °C/ minute max. allowable | -50 | | 130 | ٥C |
| 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.