## Reed Sensors for SMD Mounting

## **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  $19.5 \times 25 \times 2.5$ 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

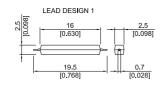


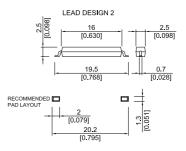
### **APPLICATIONS**

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

### **DIMENSIONS**

All dimensions in mm [inches]





## **MAGNETIC SENSITIVITY**

SENSITIVITY CLASS	PULL IN AT RANGE		
В	10 - 15		
С	15 - 20		
D	20 - 25		
Е	25 - 30		
F	30 - 35		
G	35 - 40		

#### **Part Number Example**

MK15 - B - 1

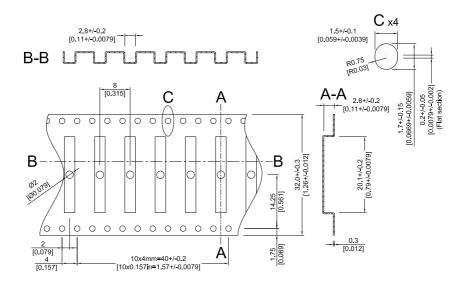
**B** is the magnetic sensitivity **1** is the lead design

1		MAGNETIC				
ORDER INFORMATION						

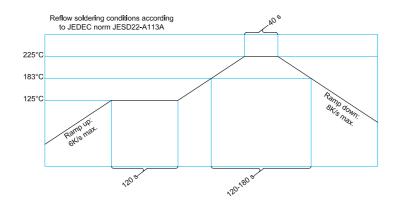
SERIES	MAGNETIC SENSITIVITY	LEAD DESIGN		
MK15 - X -		x		
OPTIONS	B, C, D, E, F, G	1, 2		

# Reed Sensors for SMD Mounting

## **TAPE & REEL**



## **SOLDERING INFORMATION**



## **CONTACT DATA**

All data 20 °C	Contact Form>	Form A			
Contact Ratings	Conditions	Min.	Тур.	Max.	Units
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	Α
Carry Current	DC or peak AC			1.25	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	1010 *			Ω
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 11ms			50	g
Vibration Resistance	From 10 - 2000 Hz			20	g
Ambient Temperature	10 °C/ minute max. allowable	-40		130	°C
Storage Temperature	10 °C/ minute max. allowable	-50		130	°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.

 $<sup>^{\</sup>star}$  Insulation resistance of 10  $^{12}$  and breakdown voltage 480 VDC is available.

<sup>\*\*</sup> These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.