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 x 2.5 x 2.5mm and the simple internal structure (low-cost version).

APPLICATIONS

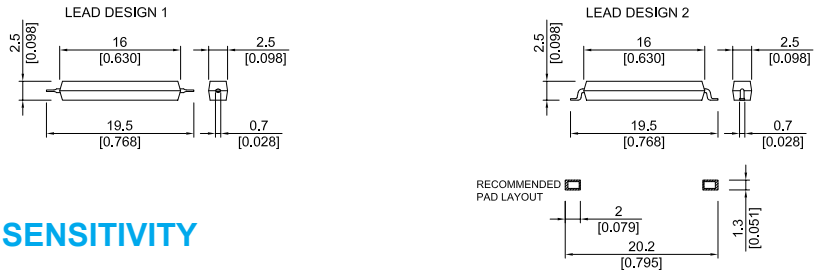
- **Electronic PCB's where all components are surface mounted**
- **Telecommunication applications**
  Hook switch in mobile and hard-wired phones
- **Switching element in microphones**

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
- Optional also in Form B available.

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

ORDER INFORMATION

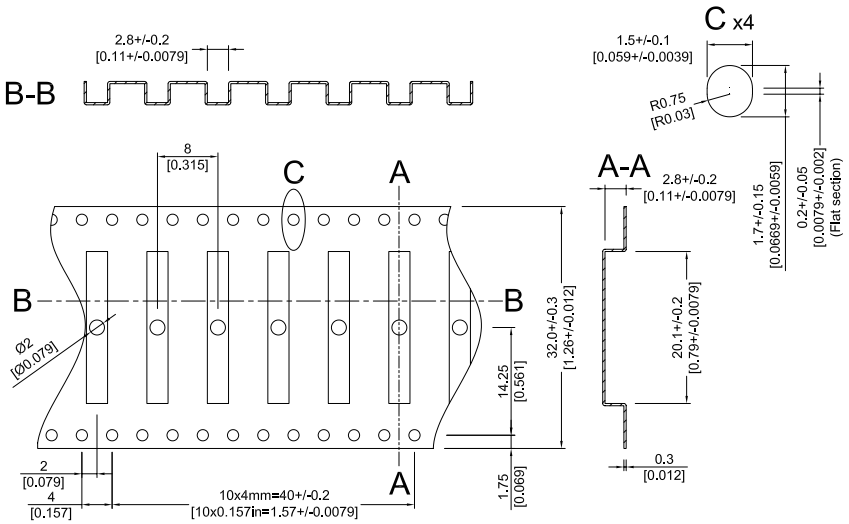
Part Number Example

MK15 - B - 1

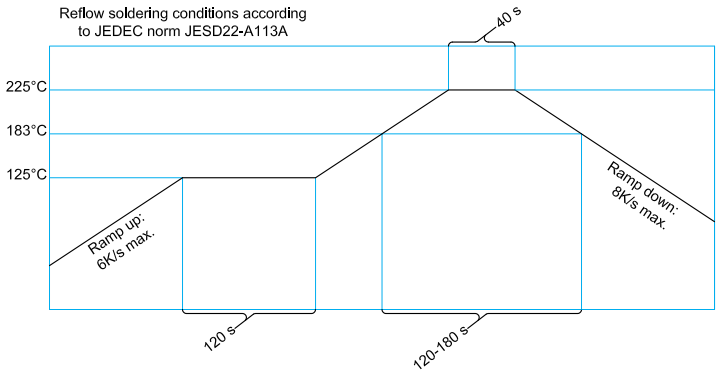
B is the magnetic sensitivity
1 is the lead design

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

TAPE & REEL



SOLDERING INFORMATION



CONTACT DATA

All data at 20° C	Contact Form -->	Form A***			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Units**
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10	W
Switching Voltage	DC oder peak AC			200	V
Switching Current	DC oder peak AC			0.5	A
Carry Current	DC oder 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 Volt applied	10^{10} *			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	@ 10 kHz across contact		0.2		pF
Contact Operation **					
Must Operate Conditon	Steady state field	10		30	AT
Must Release Condition	Steady state field	4		27	AT
Umweltdaten					
Shock Resistance	½ sine wave duration 11 ms			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. allowabl	-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.
* Insulation resistance of 10^{12} and breakdown voltage 480 VDC is available.
** These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section.
*** Also Form B (NC) available. Please consult factory if more detail is required.