Reed Sensors for SMD Mounting

DESCRIPTION

MK17 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.
- **Lead design 3:**
  J-Lead.

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 12.5 x 2.1 x 2.1mm and the simple internal structure.

APPLICATIONS

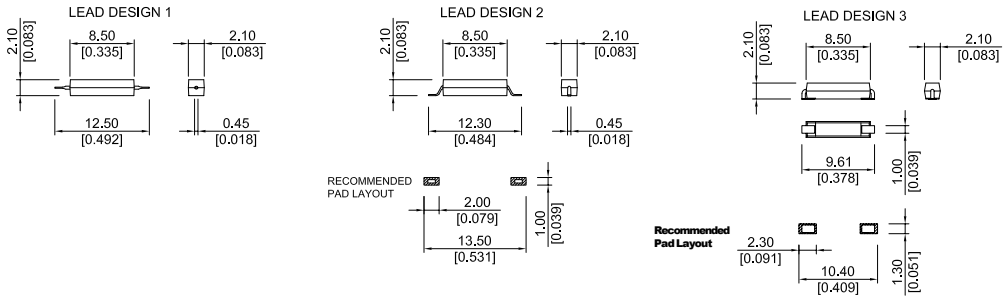
- **Electronic PCB's where all components are surface mounted**
- **Telecommunication applications**
  Hook switch in mobile and hard-wired phones
- **Switching element in microphones**

FEATURES

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

DIMENSIONS

All dimensions in mm [inches]



ORDER INFORMATION

SENSITIVITY CLASS	PULL IN AT RANGE
B	10 - 15
C	15 - 20

Part Number Example

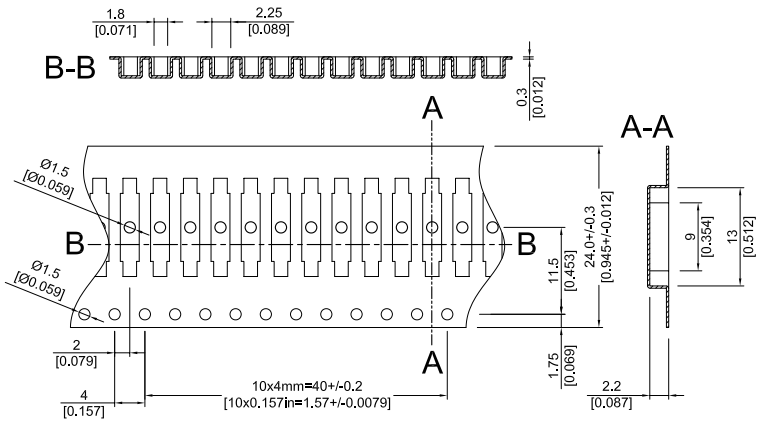
MK17 - B - 1

B is the magnetic sensitivity
1 is the lead design

SERIES	MAGNETIC SENSITIVITY	LEAD DESIGN
MK17 -	**X -**	**X**
OPTIONS	B, C	1, 2

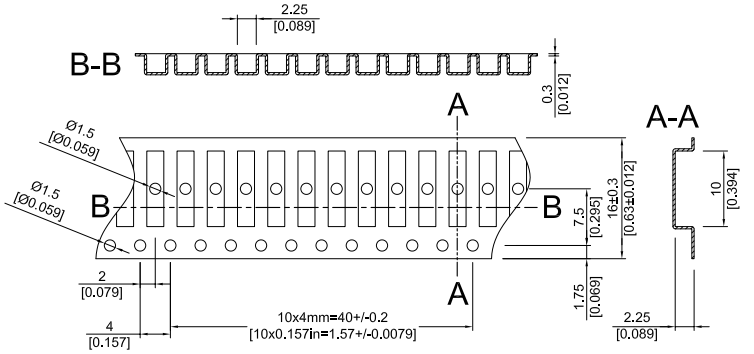
TAPE & REEL

(LEAD DESIGN 1 AND 2)



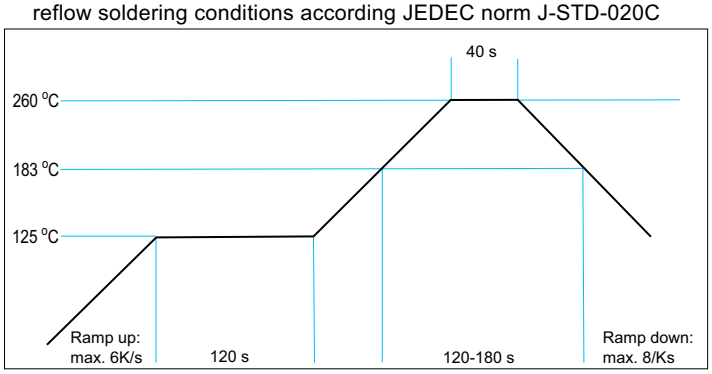
TAPE & REEL

(LEAD DESIGN 3)



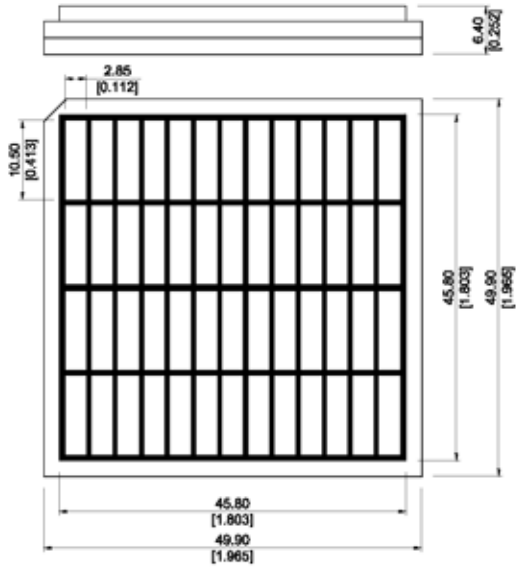
SOLDERING INFORMATION

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



TRAY

(J-LEAD OPTION ONLY)



Reed Sensors for SMD Mounting

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 or peak AC			170	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			0.5	A
Static Contact Resistance	w/ 0.5V & 10mA			200	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			250	mΩ
Insulation Resistance across Contacts	100 Volts applied	10^9			Ω
Breakdown Voltage across Contacts	Volatge applied for 60 sec. min.	210			VDC
Operate Time, incl. Bounce	Measured w/ 100% overdrive			0.6	ms
Reset 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 Reset Condition	Steady state field	4		18	AT
Environmental Data					
Shock Resistance	1/2 sine wave duration 11ms			30	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.
* These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.