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

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.

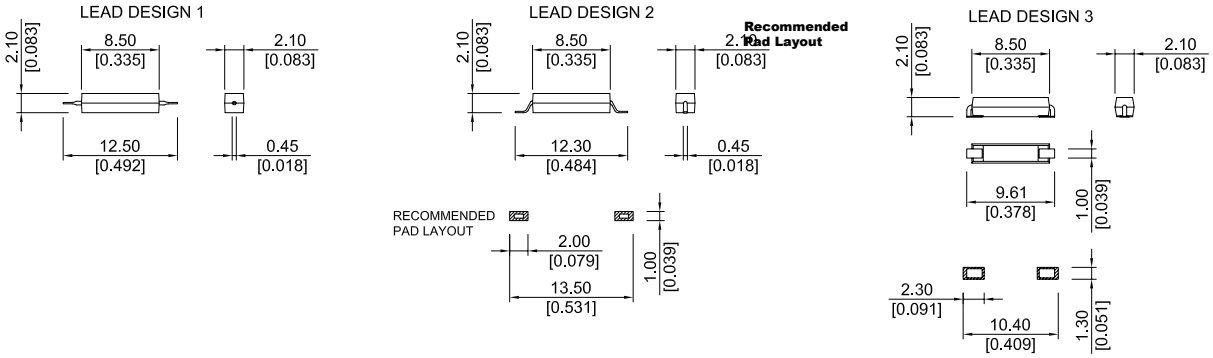
The sensors are supplied taped & reeled according to IEC 286/part 3 suitable for auto-placement. The special features of this series are the small dimensions of only 12.5 x 2.1 x 2.1mm and the simple internal structure.

FEATURES

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

DIMENSIONS

All dimensions in mm [inch]



ORDER INFORMATION

Part Number Example

MK17 - B - 1

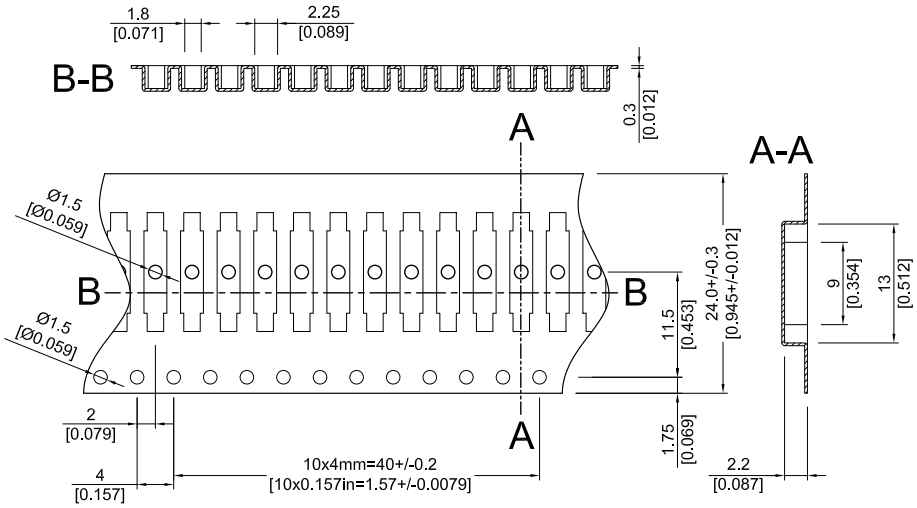
B is the magnetic sensitivity
1 is the lead design

Series	Magnetic Sensitivity	Lead Design
MK17 -	**x -**	**x**
Options	B, C, D, E	1, 2, 3

MAGNETIC SENSITIVITY

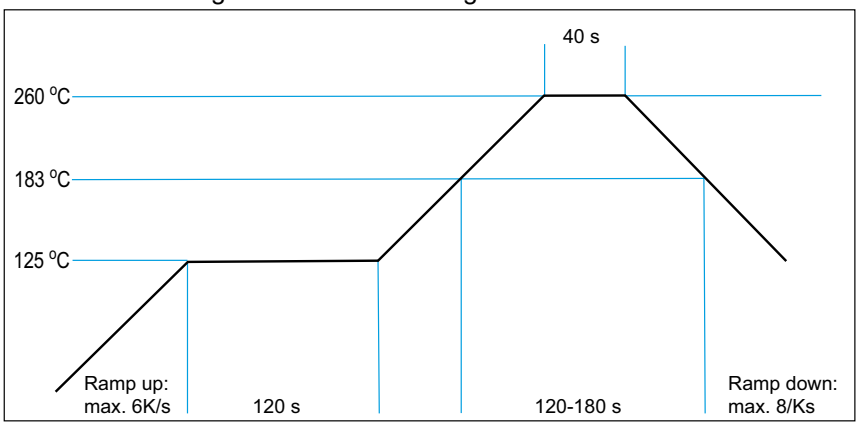
Sensitivity class	Pull In AT Range
B	10 - 15
C	15 - 20
D	20 - 25
E	25 - 30

TAPE & REEL



SOLDERING INFORMATION

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



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			100	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			0.5	A
Static Contact Resistance	w/ 0.5 V & 10 mA			200	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			250	mΩ
Insulation Resistance across Contacts	100 volts applied	10^9			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	210			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			0.6	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		18	AT
Environmental Data					
Shock Resistance	1/2 sinus wave duration 11 ms			30	g
Vibration Resistance	From 10 - 2000 Hz			20	g
Ambient Temperature	10°C/ minute max. allowable	-40		130	°C
Stock 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.