Surface Mount Reed Sensors

APPLICATIONS

- **Telecommunications**
  Hook switch sensor in mobile phones
- **Microphones**
  On/off control switch
- **Electronic PCB's where all components are surface mounted**
- **Connection detection in battery chargers**
- **Position detection**

DESCRIPTION

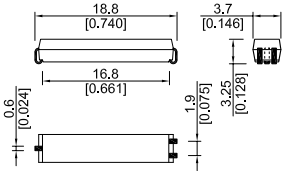
The MK1 sensor offers a selection of magnetically operated Reed proximity switches with J-lead connections for SMD mounting. The sensors are provided in standard 32 mm tape according to IEC 286 / part 3. Several AT ranges for the pull-in / drop-out sensitivities are available. Low profile packaging with a height of only 3.25 mm.

FEATURES

- Surface Mount Design
- Form C available
- High power switches available
- Four operate sensitivities available

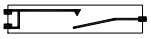
DIMENSIONS

All dimensions in mm [inches]



SCHEMATIC DRAWING

View from top of component



ORDER INFORMATION

Series	Magnetic Sensitivity
MK1 -	X
Options	B, C, D, E

Part Number Example

MK1 - B

B is the magnetic sensitivity

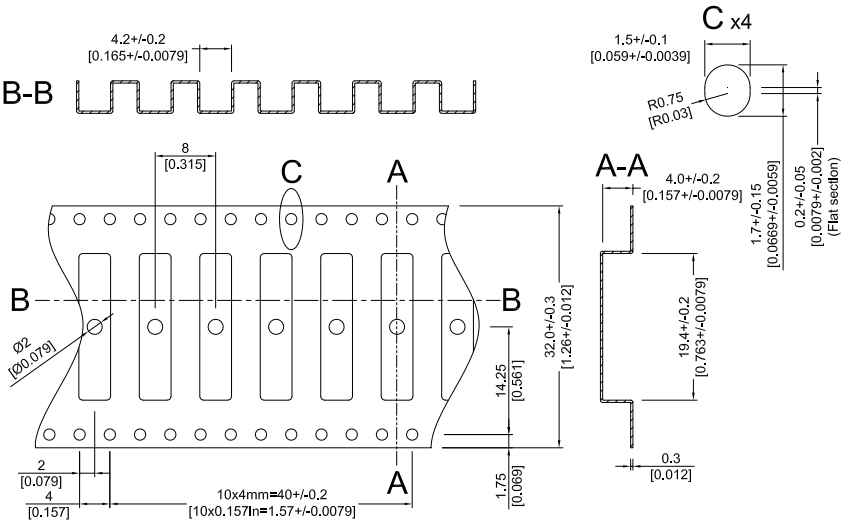
MAGNETIC SENSITIVITY

Sensitivity Class	Pull In At Range
B	10 - 15
C	15 - 25
D	20 - 25
E	25 - 30

Surface Mount
Reed Sensors

TAPE & REEL

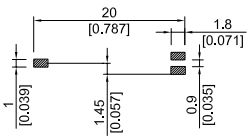
All dimensions in mm [inches]



SOLDERING INFORMATION

All dimensions in mm [inches]

Recommended Pad Layout



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			200	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or 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 volts applied	10^{10}			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	225*			VDC
Operation 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		27	AT
Environmental Data					
Shock Resistance	1/2 sinus wave duration 11 ms			50	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.
* Insulation Resistance of 10^{12} and a breakdown voltage of 48 VDC version is available.
* *These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.