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

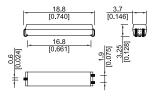
The MK01 sensor offers a selection of magnetically operated Reed proximity switches with J-lead connections for SMD mounting. The sensors are provided in standard 32 mm tape according to IEC 286 / part 3. Several AT ranges for the pull-in / drop-out sensitivities are available. Low profile packaging 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 [inch]



SCHEMATIC DRAWING

View from top of component



ORDER INFORMATION

Series	Contact Form	Magnetic Sensitivity				
MK01 -	x	x				
Options	1 Form A	B, C, D, E				
	1 Form C	H, I, K				

Part Number Example:

MK01 - B

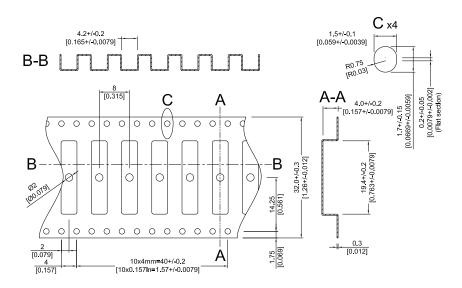
B is the magnetic sensitivity

MAGNETIC SENSITIVITY

Sensitivity Class	Pull-In AT Range				
В	10 - 15				
C, H	15 - 20				
D, I	20 - 25				
E, K	25 - 30				

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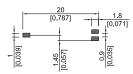
TAPE & REEL
All dimensions in mm [inch]



SOLDERING INFORMATION

All dimensions in mm [inch]

Recommended Pad Layout



Surface Mount Reed Sensors

CONTACT DATA

All Data at 20° C	Contact Form →	Form A			Contact 90 Form C			
Contact Ratings	Conditions	Min.	Тур.	Max.	Min.	Тур.	Max.	Units
Switching Power	Any DC combination of V & A not to exceed their individual max. 's			10			20	w
Switching Voltage	DC or peak AC			200			175	V
Switching Current	DC or peak AC			0.5			0.5	А
Carry Current	DC or peak AC			1.25			1.0	А
Static Contact Resistance	w/ 0.5 V & 10 mA			150			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			200			250	mΩ
Insulation Resistance across Contacts	100 volts applied	10 ¹⁰			10 ⁹			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	225*			200			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			0.6			0.7	ms
Release Time	Measured w/ no coil suppression			0.1			1.5	ms
Capacitance	at 10 kHz cross contact		0.2			1.0		pF
Contact Operation **								
Must Operate Condition	Steady state field	10		30	15		40	AT
Must Release condition	Steady state field	4		27				AT
Environmental Data								
Shock Resistance	1/2 sinus wave duration 11 ms			50			50	g
Vibration Resistance	From 10 - 2000 Hz			20			20	g
Ambient Temperature	10°C/ minute max. allowable	-40		130	-20		85	∘C
Stock Temperature	10°C/ minute max. allowable	-50		130	-35		85	∘c
Soldering Temperature	5 sec. dwell			260			260	∘C

Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch.

^{*} Insulation Resistance of 10¹² and a breakdown voltage of 480 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.