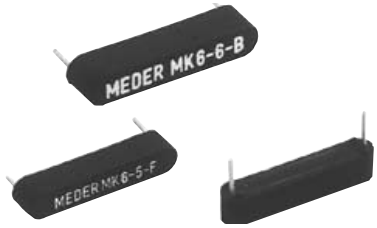
Reed Sensors for PCB Mounting



APPLICATIONS

- **Telecommunications**
  Telephone hook switch, keyboard applications
- **Domestic appliances**
  Door switch for washing machines, dishwashers, microwave ovens, baking ovens, refrigerators
- **Limit switch for low-power signals**
  Garage door controls, lever hoists, conveyors
- **Lifts / elevators**
  Position indicators

DESCRIPTION

MK06 sensors are magnetically operated Reed proximity switches for direct PCB mounting. The sensor should be mounted on a fixed surface with the actuating magnet on the moving surface. Introduction or removal of the magnetic field determines the closing and opening of the Reed Switch. (2.54 mm PCB pin spacing, available with different distances)

FEATURES

- Form A, B, C and E (Latching) available
- High power switches available
- Various case sizes available
- Five operate sensitivities available

ORDER INFORMATION

Series	Packaging Size	Magnetic Sensitivity
MK06 - 10	**X -**	**X**
Options	4	B, C, D, E
	5	B, C
	6	B, C, D, E
	7	B, C, D, E
	8 (Form A)	B, C, D, E
	8 (Form B)	H, I, K

Series	Contact Form
MK06 - 10	**X ***
Options	B
	E

* See footnote on following page.

MAGNETIC SENSITIVITY

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

Part Number Example

MK06 - 4 - C

4 is the packaging size
C is the magnetic sensitivity

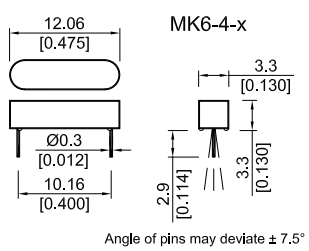
Part Number Example

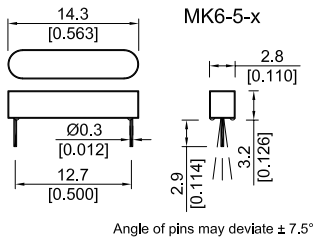
MK06 - 10 - E

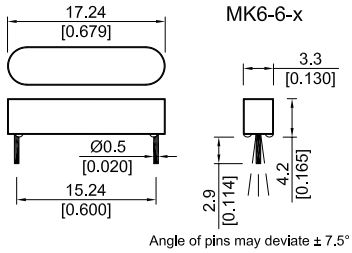
E selects the latching option

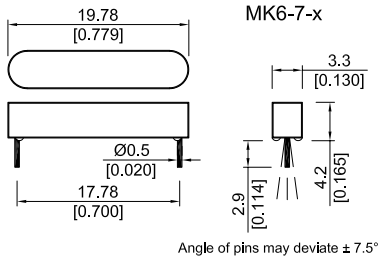
DIMENSIONS

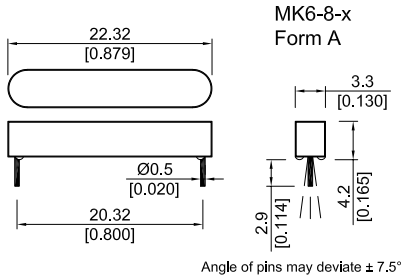
All dimensions in mm [inch]

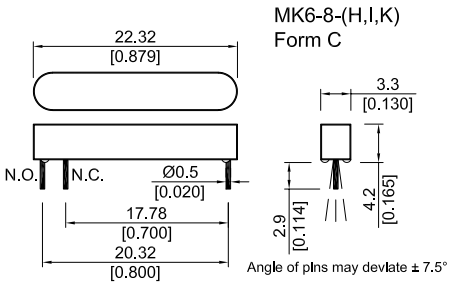


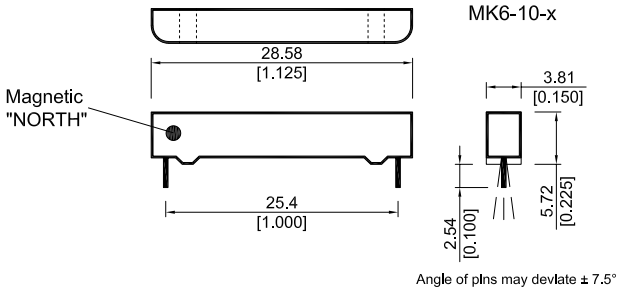












*** MK6-10-E** is a magnetic latching sensor which is opened or closed by a passing magnet and remains in that state until a magnet of opposite polarity or direction passes by again. The E refers to a latching sensor and does not represent the magnetic sensitivity.

MK6-10-B is a normally closed sensor. The B refers to a latching sensor and does not represent the magnetic sensitivity.

CONTACT DATA

All Data at 20° C	Switch Model → Contact Form → Packing Style →	Switch 66 Form A, B, C 6, 7, 8, 10			Switch 80 Form A 4			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Min.**	**Typ.**	**Max.**	**Units**
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10			10	W
Switching Voltage	DC or peak AC			200			170	V
Switching Current	DC or peak AC			0.5			0.5	A
Carry Current	DC or peak AC			1.25			0.5	A
Static Contact Resistance	w/ 0.5 V & 10mA			150			200	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA , 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 *			210			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			0.5			0.6	ms
Release Time	Measured w/ no coil suppression			0.1			0.1	ms
Capacitance	at 10 kHz cross contact		0.2			0.2		pF
Contact Operation **								
Must Operate Condition	Steady state field	10		30	10		30	AT
Must Release Condition	Steady state field	4		27	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	-20		85	-20		85	°C
Stock Temperature	10°C/ minute max. allowable	-35		85	-35		85	°C
Soldering Temperature	5 sec.			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 10^{12} and breakdown voltage of 480 VDC is available.
** These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.

CONTACT DATA

All Data at 20° C	Switch Model → Contact Form → Packing Style →	Switch 87 Form A 5			Switch 90 Form C 8			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Min.**	**Typ.**	**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	A
Carry Current	DC or peak AC			0.5			1.0	A
Static Contact Resistance	w/ 0.5 V & 10mA			200			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA , 1.5 ms after closure			200			250	mΩ
Insulation Resistance across Contacts	100 volts applied	10^9			10^9			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	100			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	-20		85	-20		85	°C
Stock Temperature	10°C/ minute max. allowable	-35		85	-35		85	°C
Soldering Temperature	5 sec.			260			260	°C

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