#### **DESCRIPTION**

MK22-Sensors are magnetically operated, over moulded Reed proximity Switches for SMD mounting.

Lead design 1: Flat, straight leads for PCB slot mounting.

Lead design 2: Flat, bent SMD leads (15.6 mm length)

Lead design 3: Flat, bent SMD leads (19.5 mm length)

Magnet force and position magnet/sensor determine Pull-In and Drop-Out point. The sensors are supplied taped & reeled according to IEC 286/part 3 suitable for auto-placement.



### **FEATURES**

- Over moulded Reed switches for better mechanical resistance
- · Flat leads in three different designs
- · Tape & Reel package
- · Six operate sensitivities available
- No external power required for sensor operation

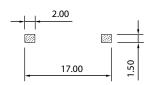
### **APPLICATIONS**

- Electronic PCB's where all components are surface mounted
- No power-requirement sensor for low power applications
- · Telecommunication applications
- Automotive applications

### **PAD LAYOUT**

All dimensions in mm [inch] unspecified tolerances +/- 0.1 mm

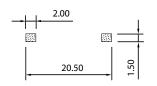
Lead design 1



Lead design 2

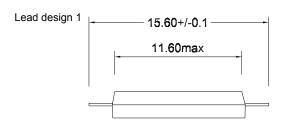


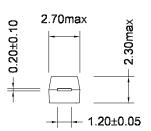
Lead design 4

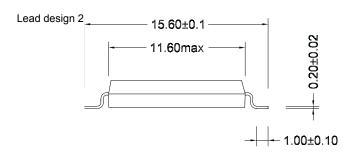


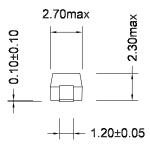
### **DIMENSIONS**

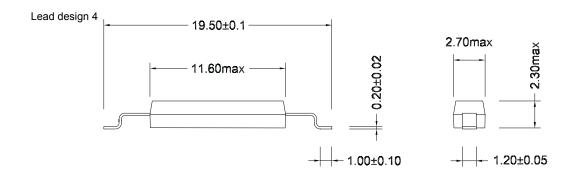
All dimensions in mm [inch] unspecified tolerances +/- 0.1 mm











### **ORDER INFORMATION**

#### **Part Number Example**

MK22 - B - 4

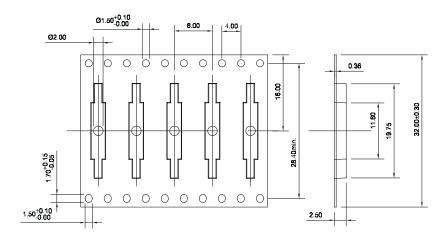
**B** is the magnetic sensitivity **4** is the lead design

Series	Magnetic Sensitivity	Lead Design	
MK 22 -	X -	х	
Options	A, B, C	1, 2, 4	

# **MAGNETIC SENSITIVITY**

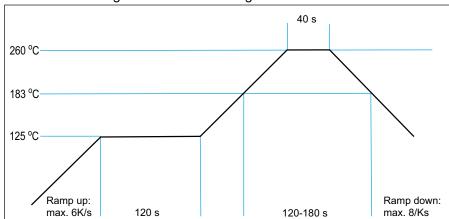
Sensitivity Class	Pull In AT Range		
В	10 - 15		
С	15 - 20		

### **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.	Тур.	Max.	Units
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			20*	w
Switching Voltage	DC or peak AC			200	V
Switching Current	DC or peak AC			1.0	Α
Carry Current	DC or peak AC			1.25	Α
Static Contact Resistance (initial)	w/ 0.5 V & 10 mA			150	mΩ
Insulation Resistance	RH 45%	10 <sup>12</sup>			Ω
Breakdown Voltage	Voltage applied for 60 sec. min.	320			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			0.5	ms
Release Time	Measured w/ no coil suppression			0.1	ms
Capacitance	at 10 kHz cross contact		0.2		pF
Contact Operation **					
Pull-In Switch unmodified	Test coil KMS-02	10		3.5	AT
Drop-Out Switch unmodified	Test coil KMS-02	5.5		28	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.			260	∘C

<sup>\*</sup> The indicated electrical data are maximum values and can vary downwards when using a more

sensitive switch. Consult factory if more detail is required.

\*\* These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section.

Consult factory if more detail is required.