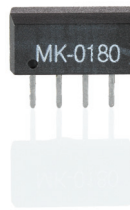


MK



MK

Reed Sensor with integrated resistor

Electrical Characteristics @ 25 °C

Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	150
	VAC	120
Switching current max.	A	0.5
Carry current max.	A	0.7
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	200
Insulation resistance min.	Ω	10 ⁹

Features

- Sensor with integrated resistor
- Mechanically protected
- Customized types available

Magnetical Characteristics (of unmodified Reed Switch) @ 25 °C

Pull in range available	AT	10 - 15
Drop out min.	AT	5
Test coil	TC -	302
Test equipment tolerance	± AT	2

Operating Characteristics (of unmodified Reed Switch) @ 25 °C

Switching frequency max.	Hz	600
Resonant frequency typ.	Hz	12000
Operate time max. (incl. bounce)	ms	0.3
Release time max.	ms	0.1

Environmental Characteristics

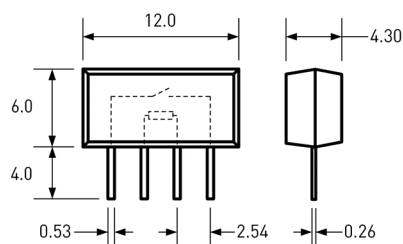
Operating temperature	°C	-40 to + 125
Vibration (50-2000 Hz)	g	10
Shock (1/2 sin 11 ms)	g	50

Approvals

RoHS

REACH

Dimensions in mm



Ordering Information

Packing Unit	1280 pcs
Weight per piece	0.58 g
Weight per package	1350 g
Resistance in Ohms	MK-xxxx (1.8 W, 10%) Resistance value is arbitrary

Ordering Example

MK-0270 describes MK with 10-15 AT and 270 Ohms resistor

Remarks

When mounted onto ferromagnetic parts switching distance of MK may reduce.
Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

MS-110X

Kein Foto verfügbar



MS-110X

Latching reed sensor pitch 25.4 mm

Electrical Characteristics		@ 25 °C
Contact form		E
Contact rating max.	W / VA	5
Switching voltage max.	VDC	140
	VAC	100
Switching current max.	A	0.5
Carry current max.	A	0.7
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	150
Insulation resistance min.	Ω	10 ⁹

Features
▶ Compact size
▶ No power supply required
▶ Not ESD sensitive

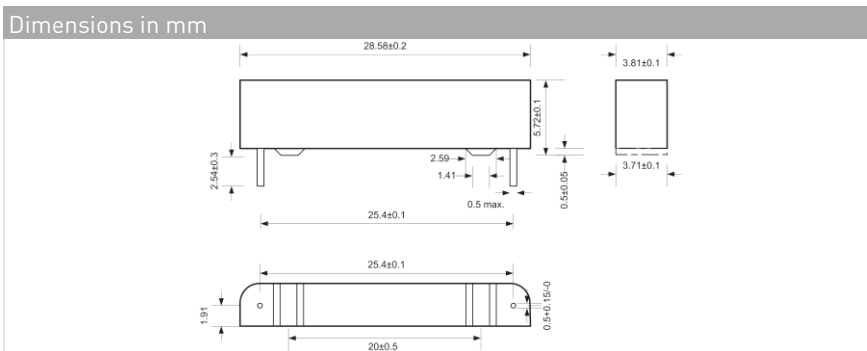
Magnetical Characteristics (of unmodified Reed Switch)		@ 25 °C
Pull in range available	AT	0 - 0
Drop out min.	AT	
Test coil	TC -	
Test equipment tolerance	± AT	2

Approvals
 

Operating Characteristics (of unmodified Reed Switch)		@ 25 °C
Switching frequency max.	Hz	500
Resonant frequency typ.	Hz	4000
Operate time max. (incl. bounce)	ms	1
Release time max.	ms	0.4

Environmental Characteristics		
Operating temperature	°C	-20 to + 85
Vibration (50-2000 Hz)	g	10
Shock (1/2 sin 11 ms)	g	50

Ordering Information	
Packing Unit	0 pcs
Weight per piece	0 g
Weight per package	0 g
Standard AT Ranges	



Ordering Example

Remarks
When mounted onto ferromagnetic parts switching distance of MS-110X may reduce. Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

Material Information		
Housing	Material PA-GF	Colour black
Potting compound	Epoxy	black

MS-105-3



MS-105-3

Miniature Reed Sensor
pitch 12.70 mm

Electrical Characteristics @ 25 °C

Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	150
	VAC	120
Switching current max.	A	0.5
Carry current max.	A	0.7
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	200
Insulation resistance min.	Ω	10 ⁹

Features

- > Small size
- > Mechanically protected
- > Replaces various competitors types
- > Customized types available

Magnetical Characteristics (of unmodified Reed Switch) @ 25 °C

Pull in range available	AT	10 - 20
Drop out min.	AT	4
Test coil	TC	010
Test equipment tolerance	± AT	1

Approvals



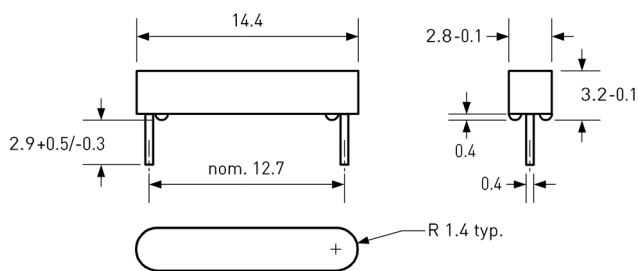
Operating Characteristics (of unmodified Reed Switch) @ 25 °C

Switching frequency max.	Hz	600
Resonant frequency typ.	Hz	12000
Operate time max. (incl. bounce)	ms	0.3
Release time max.	ms	0.1

Environmental Characteristics

Operating temperature	°C	-20 to +85
Vibration (50-2000 Hz)	g	10
Shock (1/2 sin 11 ms)	g	50

Dimensions in mm



Ordering Information

Packing Unit	1000 pcs
Weight per piece	0.17 g
Weight per package	215 g
Standard AT Ranges	
	1 = 10 to 15 AT
	2 = 15 to 20 AT

Ordering Example

MS-105-3-1 describes MS-105-3 with 10 to 15 AT.

MS-105-3



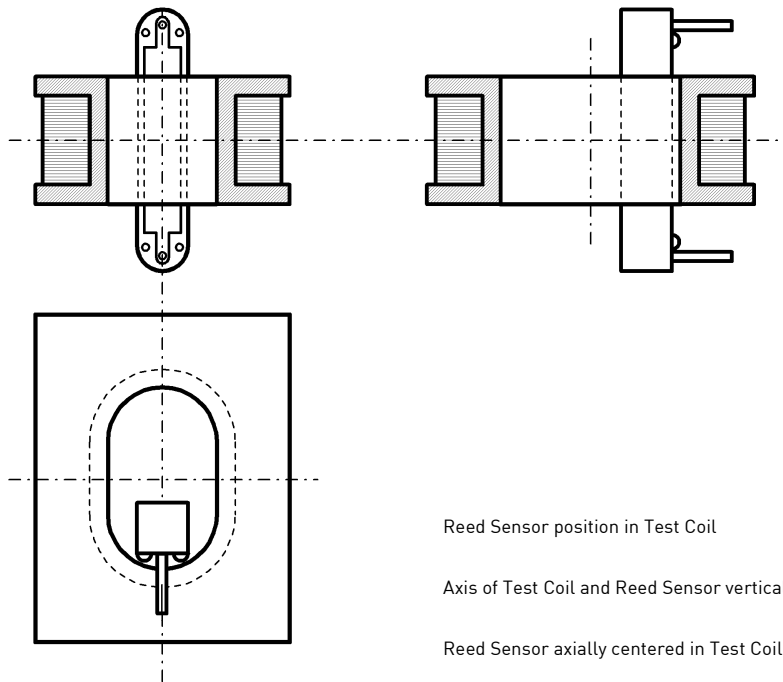
MS-105-3

Miniature Reed Sensor
pitch 12.70 mm

Material Information

	Material	Colour
Housing	PA-GF	black
Potting compound	Epoxy	black

Test Procedure of final Reed Sensor



- Reed Sensor position in Test Coil
- Axis of Test Coil and Reed Sensor vertical
- Reed Sensor axially centered in Test Coil
- Leads of Reed Sensor fixed by test jig

Test Parameters

Test coil	TC-308
Test programs	
AT range	Test program
1 =	MS-105-3-1
2 =	MS-105-3-2

Remarks

When mounted onto ferromagnetic parts switching distance of MS-105-3 may reduce.
Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

MS-106-3



MS-106-3

Miniature Reed Sensor
pitch 15.24 mm

Electrical Characteristics @ 25 °C

Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	180
	VAC	130
Switching current max.	A	0.7
Carry current max.	A	1
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	150
Insulation resistance min.	Ω	10 ⁹

Features

- Small size
- Mechanically protected
- Various sensitivity ranges available

Magnetical Characteristics (of unmodified Reed Switch) @ 25 °C

Pull in range available	AT	10 - 25
Drop out min.	AT	4
Test coil	TC	010
Test equipment tolerance	± AT	2

Approvals



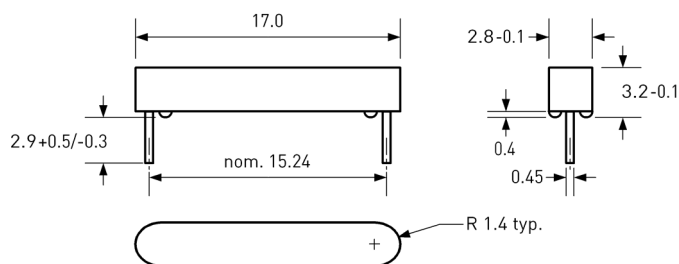
Operating Characteristics (of unmodified Reed Switch) @ 25 °C

Switching frequency max.	Hz	500
Resonant frequency typ.	Hz	5000
Operate time max. (incl. bounce)	ms	0.5
Release time max.	ms	0.3

Environmental Characteristics

Operating temperature	°C	-20 to +85
Vibration (50-2000 Hz)	g	20
Shock (1/2 sin 11 ms)	g	100

Dimensions in mm



Ordering Information

Packing Unit	1000 pcs
Weight per piece	0.2 g
Weight per package	245 g
Standard AT Ranges	
	1 = 10 to 15 AT
	2 = 15 to 20 AT
	3 = 20 to 25 AT

Ordering Example

MS-106-3-2 describes MS-106-3 with 15 to 20 AT.

MS-106-3



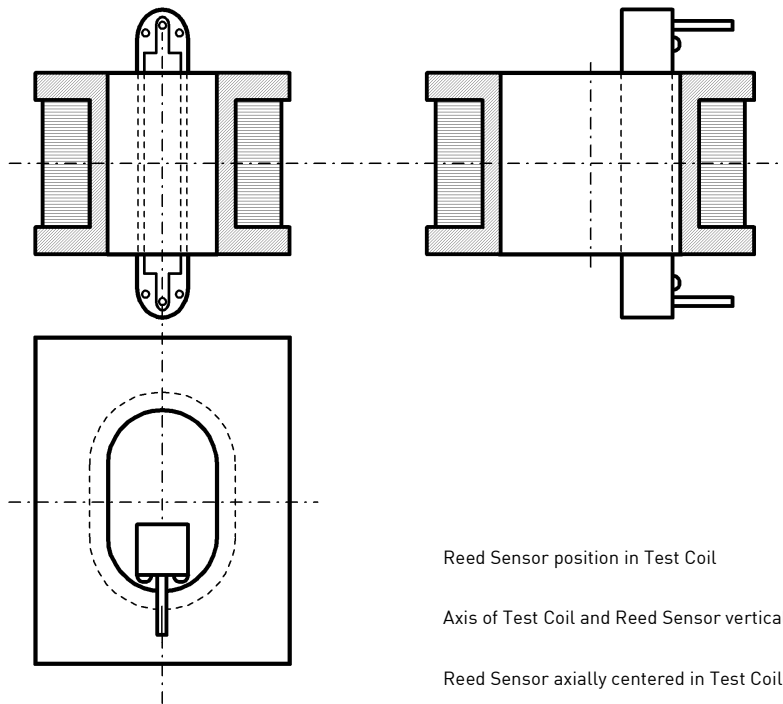
MS-106-3

Miniature Reed Sensor
pitch 15.24 mm

Material Information

	Material	Colour
Housing	PA-GF	black
Potting compound	Epoxy	black

Test Procedure of final Reed Sensor



- Reed Sensor position in Test Coil
- Axis of Test Coil and Reed Sensor vertical
- Reed Sensor axially centered in Test Coil
- Leads of Reed Sensor fixed by test jig

Test Parameters

Test coil	TC-307
Test programs	
AT range	Test program
1 =	MS-106-3-1
2 =	MS-106-3-2
3 =	MS-106-3-3

Remarks

When mounted onto ferromagnetic parts switching distance of MS-106-3 may reduce.
Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

MS-107-3



MS-107-3

Reed Sensor pitch 17.78 mm

Electrical Characteristics		@ 25 °C
Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	180
	VAC	130
Switching current max.	A	0.7
Carry current max.	A	1
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	150
Insulation resistance min.	Ω	10 ⁹

Features
▶ Mechanically protected
▶ Not ESD sensitive
▶ Various sensitivity ranges available
▶ Customized types available

Magnetical Characteristics (of unmodified Reed Switch)		@ 25 °C
Pull in range available	AT	10 - 25
Drop out min.	AT	4
Test coil	TC -	010
Test equipment tolerance	± AT	2

Approvals
RoHS
REACH

Operating Characteristics (of unmodified Reed Switch)		@ 25 °C
Switching frequency max.	Hz	500
Resonant frequency typ.	Hz	5000
Operate time max. (incl. bounce)	ms	0.5
Release time max.	ms	0.3

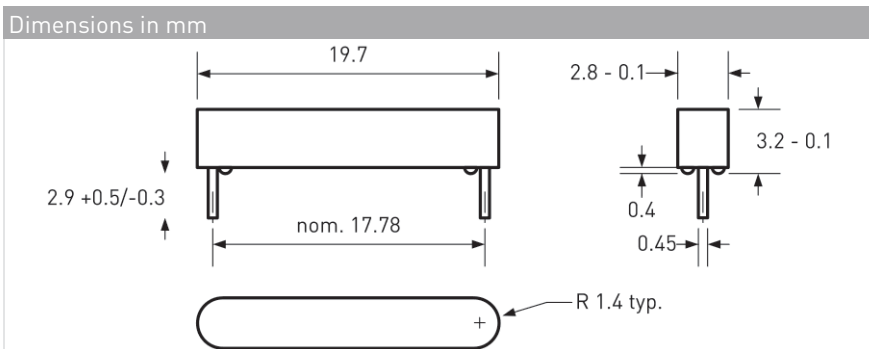
Environmental Characteristics		
Operating temperature	°C	-20 to + 85
Vibration (50-2000 Hz)	g	20
Shock (1/2 sin 11 ms)	g	100

Ordering Information	
Packing Unit	500 pcs
Weight per piece	0.42 g
Weight per package	255 g
Standard AT Ranges	

- 1 = 10 to 15 AT
- 2 = 15 to 20 AT
- 3 = 20 to 25 AT

Ordering Example
MS-107-3-1 describes MS-107 with 10-15 AT

Remarks
When mounted onto ferromagnetic parts switching distance of MS-107-3 may reduce. Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.



Material Information		
Housing	Material PA-GF	Colour black
Potting compound	Epoxy	black

MS-108-3






MS-108-3

Reed Sensor pitch 20.32 mm

Electrical Characteristics		@ 25 °C
Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	200
	VAC	140
Switching current max.	A	1
Carry current max.	A	1.2
Breakdown voltage min.	VDC	240
Total resistance max. (initial)	mΩ	100
Insulation resistance min.	Ω	10 ¹⁰

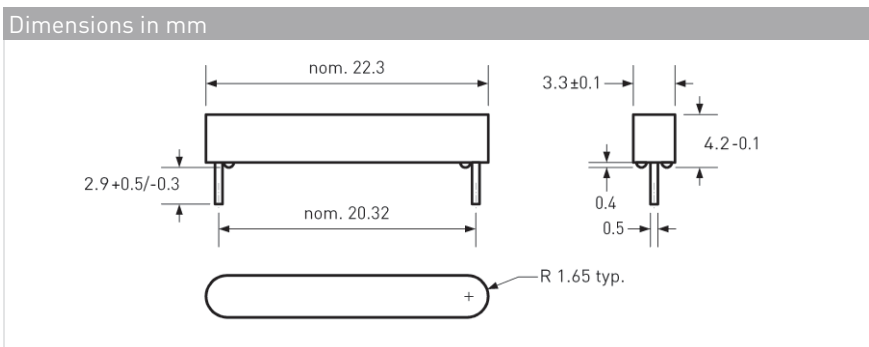
Features
➤ Mechanically protected
➤ Not ESD sensitive
➤ Various sensitivity ranges available
➤ Customized types available

Magnetical Characteristics (of unmodified Reed Switch)		@ 25 °C
Pull in range available	AT	10 - 25
Drop out min.	AT	4
Test coil	TC	014
Test equipment tolerance	± AT	2

Approvals




Operating Characteristics (of unmodified Reed Switch)		@ 25 °C
Switching frequency max.	Hz	500
Resonant frequency typ.	Hz	4000
Operate time max. (incl. bounce)	ms	1
Release time max.	ms	0.4

Environmental Characteristics		
Operating temperature	°C	-20 to +85
Vibration (50-2000 Hz)	g	20
Shock (1/2 sin 11 ms)	g	100



Ordering Information	
Packing Unit	500 pcs
Weight per piece	0.42 g
Weight per package	255 g
Standard AT Ranges	
	1 = 10 to 15 AT
	2 = 15 to 20 AT
	3 = 20 to 25 AT
	4 = 25 to 30 AT
Ordering Example	
MS-108-3-1 describes MS-108-3 with 10 to 15 AT.	

MS-108-3



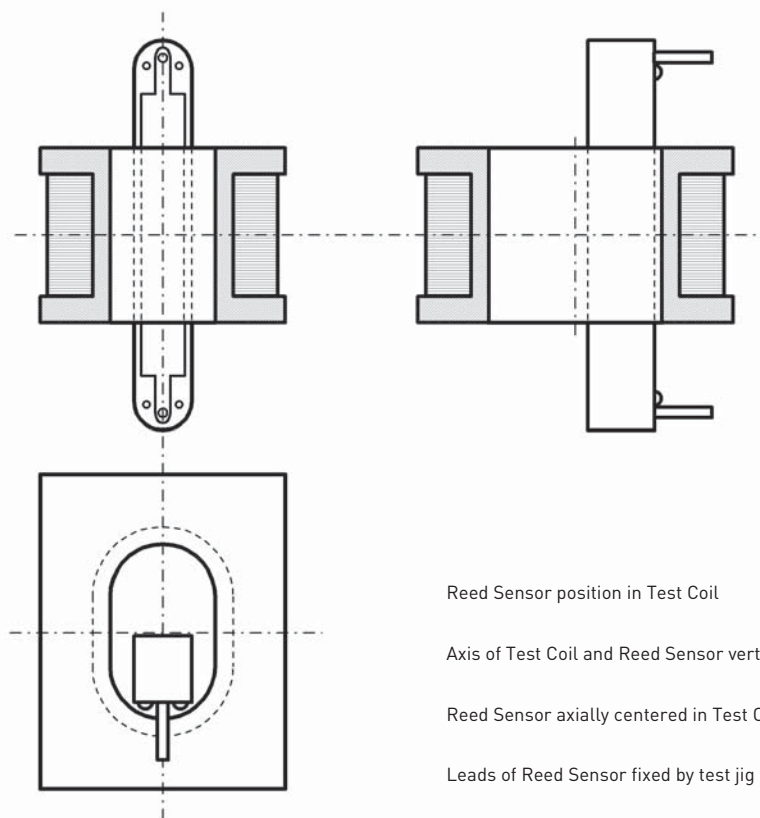
MS-108-3

Reed Sensor pitch 20.32 mm

Material Information

	Material	Colour
Housing	PA-GF	black
Potting compound	Epoxy	black

Test Procedure of final Reed Sensor



Test Parameters

Test coil	TC- 307
Test programs	
AT range	Test program
1 =	MS-108-3-1
2 =	MS-108-3-2
3 =	MS-108-3-3
4 =	MS-108-3-4

Remarks

When mounted onto ferromagnetic parts switching distance of MS-108-3 may reduce.
Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

MS-108-4



MS-108-4

Form C Reed Sensor
pitch 20.32 mm

Electrical Characteristics @ 25 °C

Contact form		C
Contact rating max.	W / VA	5
Switching voltage max.	VDC	175
	VAC	120
Switching current max.	A	0.25
Carry current max.	A	1.5
Breakdown voltage min.	VDC	200
Total resistance max. (initial)	mΩ	100
Insulation resistance min.	Ω	10 ⁹

Features

- Mechanically protected
- Not ESD sensitive
- Various sensitivity ranges available
- Customized types available

Magnetical Characteristics (of unmodified Reed Switch) @ 25 °C

Pull in range available	AT	15 - 30
Drop out min.	AT	5
Test coil	TC	200
Test equipment tolerance	± AT	2

Operating Characteristics (of unmodified Reed Switch) @ 25 °C

Switching frequency max.	Hz	100
Resonant frequency typ.	Hz	1100
Operate time max. (incl. bounce)	ms	0.7
Release time max.	ms	1

Environmental Characteristics

Operating temperature	°C	-20 to +85
Vibration (50-2000 Hz)	g	30
Shock (1/2 sin 11 ms)	g	50

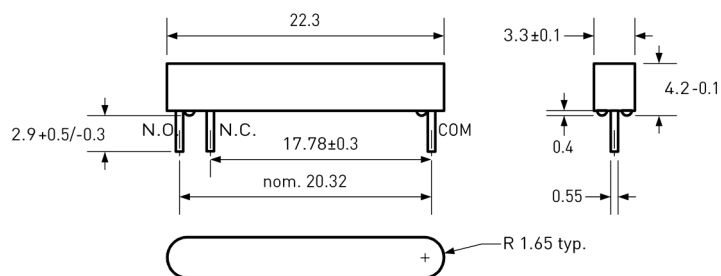
Approvals

RoHS

REACH

UL US

Dimensions in mm



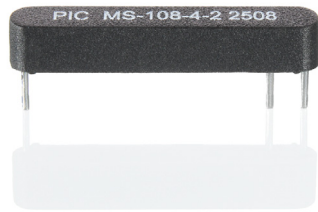
Ordering Information

Packing Unit	500 pcs
Weight per piece	0.45 g
Weight per package	270 g
Standard AT Ranges	
	2 = 15 to 20 AT
	3 = 20 to 25 AT
	4 = 25 to 30 AT

Ordering Example

MS-108-4-2 describes MS-108-4 with 15 to 20 AT.

MS-108-4



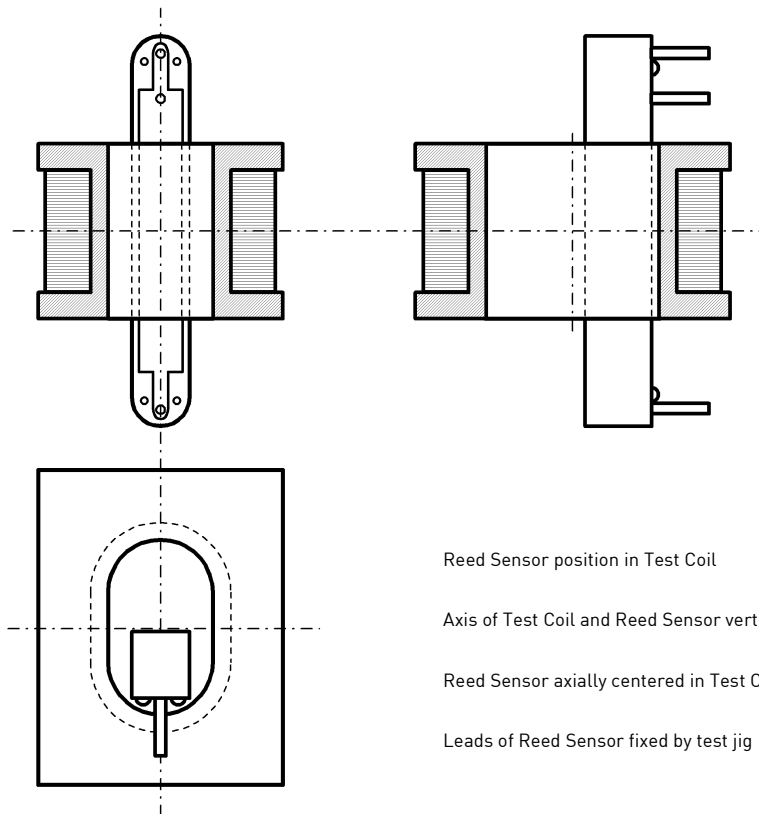
MS-108-4

Form C Reed Sensor
pitch 20.32 mm

Material Information

	Material	Colour
Housing	PA-GF	black
Potting compound	Epoxy	black

Test Procedure of final Reed Sensor



Test Parameters

Test coil	TC-307
Test programs	
AT range	Test program
2 =	MS-108-4-2
3 =	MS-108-4-3
4 =	MS-108-4-4

Remarks

When mounted onto ferromagnetic parts switching distance of MS-108-4 may reduce. Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.

MS-108-5



MS-108-5

Mains switching Reed Sensor
pitch 20.32 mm

Electrical Characteristics @ 25 °C

Contact form		A
Contact rating max.	W / VA	10
Switching voltage max.	VDC	200
	VAC	260
Switching current max.	A	0.3
Carry current max.	A	1.4
Breakdown voltage min.	VDC	400
Total resistance max. (initial)	mΩ	100
Insulation resistance min.	Ω	10 ¹⁰

Features

- > Mechanically protected
- > Mains switch inside
- > Various sensitivity ranges available
- > Customized types available

Magnetical Characteristics (of unmodified Reed Switch) @ 25 °C

Pull in range available	AT	15 - 30
Drop out min.	AT	4
Test coil	TC	200
Test equipment tolerance	± AT	2

Operating Characteristics (of unmodified Reed Switch) @ 25 °C

Switching frequency max.	Hz	400
Resonant frequency typ.	Hz	4000
Operate time max. (incl. bounce)	ms	0.6
Release time max.	ms	0.2

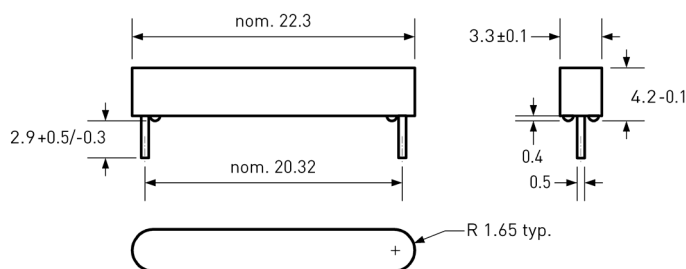
Environmental Characteristics

Operating temperature	°C	-20 to +85
Vibration (50-2000 Hz)	g	30
Shock (1/2 sin 11 ms)	g	100

Approvals



Dimensions in mm



Ordering Information

Packing Unit	500 pcs
Weight per piece	0.42 g
Weight per package	255 g
Standard AT Ranges	
	2 = 15 to 20 AT
	3 = 20 to 25 AT
	4 = 25 to 30 AT

Ordering Example

MS-108-5-2 describes MS-108-5 with 15 to 20 AT.

MS-108-5



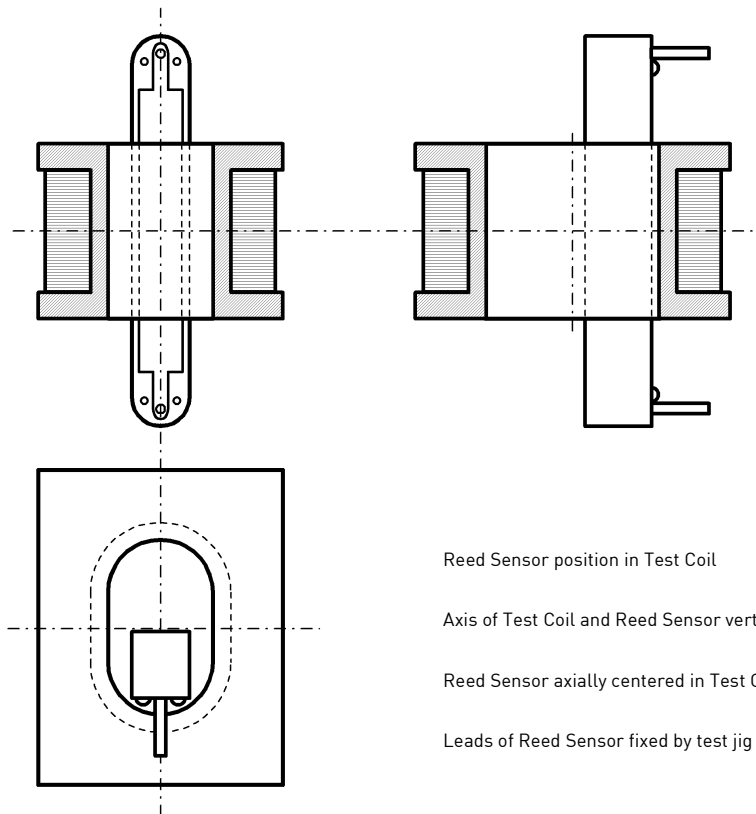
MS-108-5

Mains switching Reed Sensor
pitch 20.32 mm

Material Information

	Material	Colour
Housing	PA-GF	black
Potting compound	Epoxy	black

Test Procedure of final Reed Sensor



Test Parameters

Test coil	TC-307
Test programs	
AT range	Test program
2 =	MS-108-5-2
3 =	MS-108-5-3
4 =	MS-108-5-4

Remarks

When mounted onto ferromagnetic parts switching distance of MS-108-5 may reduce. Electromagnetical influences and magnetic fields may change the switching behaviour of the sensor.