

# KMR2 Series

Micro Miniature Tactile Switch for SMT 4.2 x 2.2 mm,  
with 1.9 mm Height Actuator



## Description

The KMR2 series of micro miniature tactile switches for SMT are 1.9 mm high momentary action tactile switches which are available with a variety of operating forces and in a range of electrical lifespans, depending on the model. The KMR2 series has ultra low current capabilities and is designed to give users a positive adaptable tactile feeling, ideal for industrial, medical and automotive applications.

## Features & Benefits

- Small footprint
- Good tactile feedback
- Ultra low current capabilities
- IP40
- Compatible with lead free reflow soldering process of SMT devices
- Low halogen, RoHS and REACH compliant

## Specifications

<b>Function</b>	Momentary action
<b>Contact Arrangement</b>	1 make contact = SPST, N.O.
<b>Terminals</b>	Gullwing type for SMT
<b>Sealing</b>	IP40

## Electrical Characteristics

	Silver	Gold
<b>Maximum Power</b>	1 VA	0.2 VA
<b>Maximum Voltage</b>	32 VDC	32 VDC
<b>Minimum Voltage</b>	20 mVDC	20 mVDC
<b>Maximum Current</b>	50 mA	10 mA
<b>Minimum Current</b>	1 mA <sup>1</sup>	1 mA <sup>1</sup>
<b>Dielectric Strength</b>	≥ 250 Vrms	
<b>Contact Resistance</b>	≤ 100 mΩ	
<b>Insulation Resistance</b>	≥ 1 GΩ	
<b>Bounce Time</b>	≤ 3 ms	

## Environmental Characteristics

	Silver	Gold
<b>Operating Temperature</b>	-40°C to 85°C	-40°C to 125°C
<b>Storage Temperature</b>	-55°C to 85°C	-55°C to 125°C

## Process

<b>Soldering</b>	Lead free reflow soldering process in accordance with IEC 61760-1
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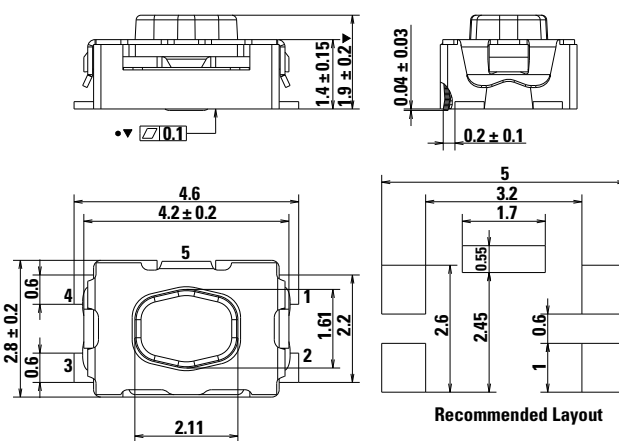
### Notes:

1. For ULC version minimum current is 1μA at 1.8 VDC
  2. Specifications listed above are for switches with standard options.
- For information on specific and custom switches, consult Customer Service Center.

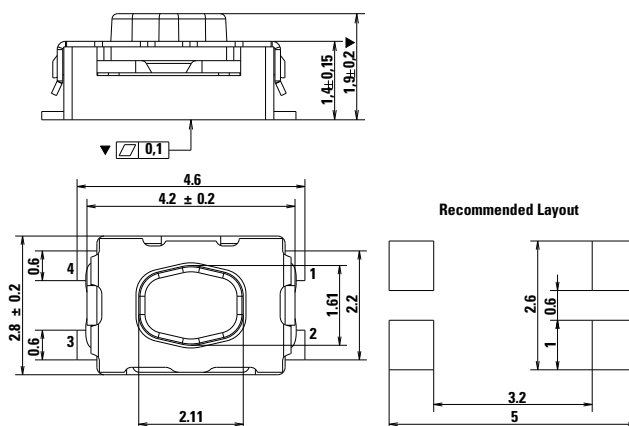
## Applications

- Transportation
- Industrial electronics
- Medical equipment

### G - Ground Pin Dimensions (mm)



### NG - No Ground Pin Dimensions (mm)



# KMR2 Series

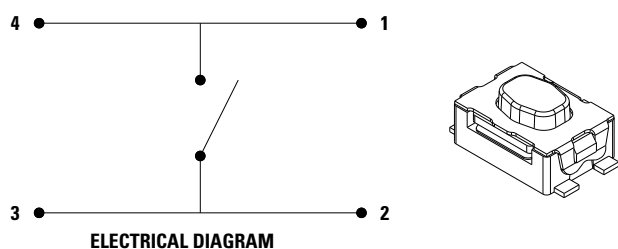
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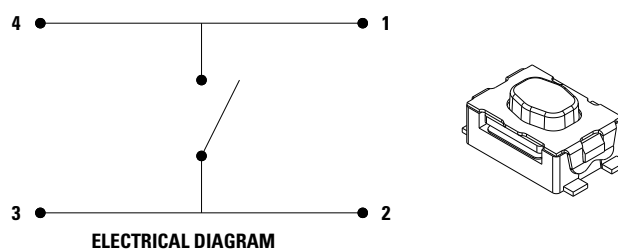
## Mechanical Characteristics

Type G and NG	Operating Life (cycles)	Travel (mm)
KMR211	200,000	0.20 mm ± 0.1
KMR213	200,000	0.20 mm ± 0.1
KMR221	200,000	0.25 mm ± 0.1
KMR223	200,000	0.25 mm ± 0.1
KMR231	150,000	0.25 mm ± 0.1
KMR232	300,000	0.25 mm ± 0.1
KMR233	150,000	0.25 mm ± 0.1
KMR241	100,000	0.30 mm ± 0.1
KMR242	200,000	0.30 mm ± 0.1
KMR243	100,000	0.30 mm ± 0.1

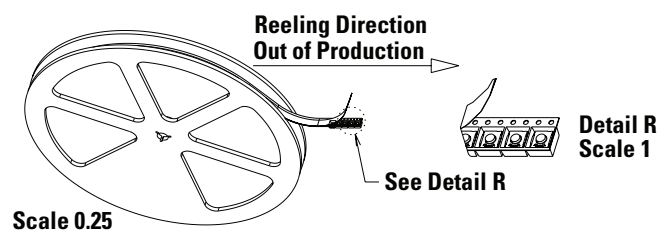
### G Terminations (mm)



### NG Terminations (mm)



### Tape & Reel



### Packaging Details

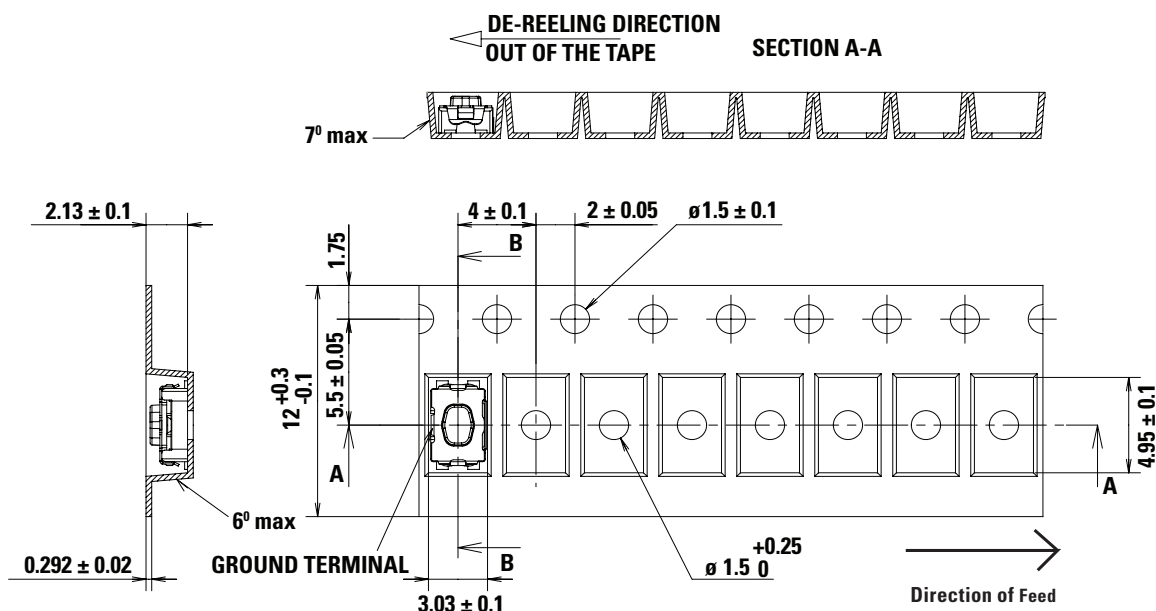
Type	Tape & reel
Number of Parts in Packaging	7,000
Other Information	Tape and reel per EIA 481
Transport Conditions	According to specification NF H00-060

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## Tape & Reel Dimensions (mm)



## Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category. However, please note that not all combinations of these options are feasible. For any part number different from those listed below, please consult your local representative

KMR - 2 - x - x - xx - xxx - xxx					
Total Height					LFS: Lead free compatible, silver plated LFG: Lead free compatible, gold plated
2: 1.9 mm					
Actuation Force					Low Current capability
1: 1.2 N (120 grams)					Void: Under standard specification
2: 2 N (200 grams)					ULC: Low current
3: 3 N (300 grams)					
4: 4 N (400 grams)					
Contact Material					Grounding Option
1: Silver					G: Ground Pin
2: Silver long life <sup>1</sup>					NG: No Ground Pin
3: Gold					

### Notes

1. Silver long life is available in 3N and 4N actuation force. For other versions, please contact Customer Service.

## Liability Limitation

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipment. Please contact customer service for the contractual specification package.

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