

## Precautions for use of Tactile switch products

- (1) When adopting the product for mass production, please exchange formal specifications with us.
- (2) Do not reverse-engineer the product including disassemble or analyze without our approval.
- (3) Please make sure to notify us in advance if you consider using the product for in-vehicle applications. Please use the product for in-vehicle applications within the scope of the specification. We will not guarantee damages you incurred by using the product for applications beyond the scope of the specification.
- (4) The product is not designed or manufactured to be used for special application (e.g. trains, ships, airplanes, spaceships, submarine repeaters, atomic energy control systems, traffic equipment, combustion equipment, medical devices, and safety devices). We will not guarantee any application suitability for goods like those described above that require special quality and reliability. In cases where the product is used in special applications and it causes extensive property damage, threatens human life or damages the human body, we will not be held liable.
- (5) When designing as a set where safety is important, make sure to consider the impact that a malfunction of a single switch has on the whole set, and ensure safety with a fail-safe design such as using a protection circuit or a protection device.
- (6) The specification and appearance of the product may change without notice for improvement, etc.
- (7) This technical information and data is provided for users as is, and we do not guarantee that it is free from errors or defect in technical information and data, or this technical information and data conform to special applications, or this technical information and data does not infringe any rights of the user or third parties other than the user, or any other contents (including changes in contents for improvement of the specification and appearance of the product) thereof.

# LS230 Series

上面押しモールドタイプ Top-press mold type



## 特徴 Features

1. 小型・薄型、高フィーリング  
Compact and thin, high sensitivity
2. 防水構造・リフロー半田対応  
Waterproof, Reflow soldering

## 用途 Applications

- ・カーオーディオ機器  
Car audio devices
- ・各種AV機器  
Various AV devices
- ・キーレスエントリー  
Keyless entry device



## 製品コード Product code

<b>LS</b>	<b>230</b>	<b>J</b>	-	-
TACTILE SWITCH 共通番号 Common for TACTILE SWITCHes	シリーズ名 Series	スイッチ高さ Thickness	操作荷重 Operating force 2=1.7N、4=3.3N 6=5.0N	納品形態 Delivery form T=テーピング T=Tape and reel 無記入=バルク No coded=Bulk packing

## 電氣的・機械的特性 Electrical and Mechanical Characteristics

(Ta 25°C)

項目 Item	仕様 Specifications
最大定格 Maximum rating	DC12V 20mA
接触抵抗 Contact resistance	500mΩ以下 500mΩ or less
絶縁抵抗 Insulation resistance	100MΩ以上 100MΩ or more
耐電圧 Withstanding voltage	AC250V 1分間 AC250V for one minute
バウンス Bounce	20ms以下 20ms or less
ストローク Stroke	0.2mm
操作荷重 Operating force	1.7N, 3.3N, 5.0N
復帰力 Return force	0.1N以上 0.1N or more
動作寿命 Operating life	10万回 100,000

## 外形寸法図 Outline drawing

単位:mm Unit : mm

