

# Telephone-hook Switches

## HSW-3 Series

1/3

### □ Features

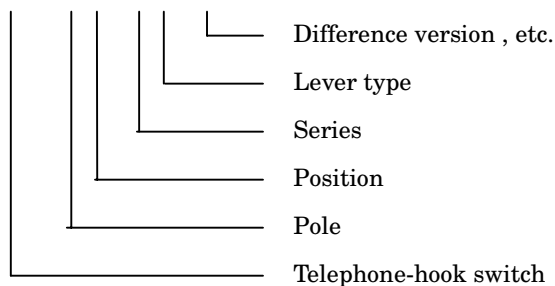
- ◇ Miniaturized for space saving design.
- ◇ Superior reliability at micro-current by employing a sliding contact.
- ◇ High reliability gained by gold contact for environment.
- ◇ Cost reduction and resource saving by the choice of 1pole-1position to 2poles-2positions.

### □ Applications

- ◇ Telephone set, Facsimile

### □ Products Number System

HSW - [ ] - [ ] - [ ]



Actual size

### □ Products Line

No	Products No	Pole	Position	Operating force	Notes
1	HSW-22-3A	2	2	0.8N max.	Standard lever type
2	HSW-22-3B	2	2	0.5N max.	

Notes : The above-mentioned product list is the example of combination of 2poles-2positions.

### □ Typical Specifications

Item	HSW-3 Series
<b>Ratings (max.)</b>	0.2A 48V DC (Resistive load , Inductive load)
<b>Contact resistance</b>	100 milliohm max.
<b>Insulation resistance</b>	100 megohm min. 500V DC
<b>Withstanding voltage</b>	1000V AC for 1min.
<b>Operating life without load</b>	500,000 cycles
<b>Operating life with load</b>	300,000 cycles

Dimensions

Unit : mm

No	Style	P.C.B reference mounting hole Dimensions , Circuit diagram (TOP VIEW)												
1	<p>HSW-22-3A</p>	<p>Timing lag diagram</p> <table border="1"> <tr><td>①②</td><td>ON</td><td>OFF</td></tr> <tr><td>②③</td><td>OFF</td><td>ON</td></tr> <tr><td>④⑤</td><td>ON</td><td>OFF</td></tr> <tr><td>⑤⑥</td><td>OFF</td><td>ON</td></tr> </table> <p>8 (6.5<sup>max</sup>)(3.5<sup>min</sup>) 2 Travel position (X)</p>	①②	ON	OFF	②③	OFF	ON	④⑤	ON	OFF	⑤⑥	OFF	ON
①②	ON	OFF												
②③	OFF	ON												
④⑤	ON	OFF												
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2	<p>HSW-22-3B</p>	<p>Timing lag diagram</p> <table border="1"> <tr><td>①②</td><td>ON</td><td>OFF</td></tr> <tr><td>②③</td><td>OFF</td><td>ON</td></tr> <tr><td>④⑤</td><td>ON</td><td>OFF</td></tr> <tr><td>⑤⑥</td><td>OFF</td><td>ON</td></tr> </table> <p>13.3 (11.3<sup>max</sup>)(6.7<sup>min</sup>) 4.5 Travel position (X)</p>	①②	ON	OFF	②③	OFF	ON	④⑤	ON	OFF	⑤⑥	OFF	ON
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**□ Notes**

1. The appearance and specifications of the product may be modified to improve its performance without prior notice.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications.
3. Please see appendix [Cautions in Using Switches ].
4. This switch is not washable.
5. Soldering shall be done with lever at free position and take care not to attach flux on plastic portion.
6. Note that if the stress is applied to the terminals during soldering, they might cause deformation and defects in electrical performance.
7. Please make stopper of the lever on the PC board or other mounting objects. Care shall be taken not to use the switch without stopper, it may cause the deformation of the lever and the deterioration of the performance.
8. Please consider the enough allowance of operating distance of the lever to the specifications.
9. Care shall be taken not to apply stress to the body of switch as it may affect the performance.
10. Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.