



## Product Change Notice for Select ESE-24 Series Detector Switch Part Numbers

PCN.PG26.04.12.2016

04/12/16

|                           |                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>About this Notice:</b> | In an effort to maximize production efficiencies, Panasonic will shift production of select ESE-24 Series part numbers from Japan to China. |
| <b>Effective Date:</b>    | All new purchase orders received after September 1, 2016.                                                                                   |
| <b>Change Details:</b>    | Production location shall be transferred from Japan to China.                                                                               |
| <b>Affected Parts:</b>    | See attached part number list.                                                                                                              |
| <b>Datasheet(s):</b>      | Supplied.                                                                                                                                   |
| <b>Notes:</b>             |                                                                                                                                             |

**Panasonic Product Change Notice PCN.PG26.04.12.2016 ESE-24 Series Detector Switches**

**Affected Part numbers**

ESE-24MH1

ESE-24MH1T

ESE-24MH1TX2

ESE-24MH1TXCB

ESE-24MH1TXEA

ESE-24MH1TXHC

ESE-24MH1TXV

ESE-24MH2

ESE-24MH3TXX

ESE-24MH5T

ESE-24MH5TXL

ESE-24MH6T

ESE-24MH6TXA

ESE-24MH6TXDU

ESE-24MV1

ESE-24MV1T

ESE-24MV1TX2

ESE-24MV1TXCB

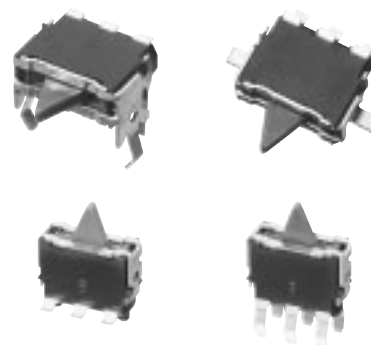
ESE-24MV6

ESE-24MV6T

### 2W Detector Switches

Type: **ESE24**

Bidirectional operation, auto-return to midpoint type.



#### ■ Features

- A lever-type detector switch with high reliability using sliding mechanical contacts
- Long over-travel (through-operation available)
- Used as an operation switch (an input device)

#### ■ Recommended Applications

- Detection of media in portable electronic equipment (CD-ROM, DVD, Digital still cameras, etc.)
- Operating switches for other electronic equipment.

#### ■ Explanation of Part Number

|              |          |          |          |          |       |   |            |   |
|--------------|----------|----------|----------|----------|-------|---|------------|---|
| 1            | 2        | 3        | 4        | 5        | 6     | 7 | 8          | 9 |
| <b>E</b>     | <b>S</b> | <b>E</b> | <b>2</b> | <b>4</b> |       |   |            |   |
| Product Code |          |          | Type     |          | Style |   | Design No. |   |

| 6th & 7th | Mounting Method & Style              |
|-----------|--------------------------------------|
| SV        | Vertical type for wave soldering     |
| SH        | Horizontal type for wave soldering   |
| MV        | Vertical type for reflow soldering   |
| MH        | Horizontal type for reflow soldering |

#### ■ Specifications

|                                 |                     |                                                                                                                                                                                          |
|---------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rating                          |                     | 50 $\mu$ A 3 Vdc to 10 mA 5 Vdc (Resistive load)                                                                                                                                         |
| Contact Resistance              |                     | 500 m $\Omega$ max. (Initial)                                                                                                                                                            |
| Insulation Resistance           |                     | 100 M $\Omega$ min. (100 Vdc)                                                                                                                                                            |
| Dielectric Withstanding Voltage |                     | 100 Vac for 1 minute                                                                                                                                                                     |
| Operating Force                 |                     | 350 mN max.                                                                                                                                                                              |
| Mounting Height                 |                     | <ul style="list-style-type: none"> <li>· Type SV 5.6 mm</li> <li>· Type SH 4.65 mm</li> <li>· Type MV 5.6 mm</li> <li>· Type MH 3.0 mm</li> </ul>                                        |
| Poles and Throws                |                     | 1-pole 2-throws (OFF at midpoint)                                                                                                                                                        |
| Full Travel (Pushing distance)  |                     | <ul style="list-style-type: none"> <li>· Type SV 6.1 mm (2.45 mm)</li> <li>· Type SH 2.6 mm (2.45 mm)</li> <li>· Type MV 6.1 mm (2.45 mm)</li> <li>· Type MH 1.4 mm (2.45 mm)</li> </ul> |
| Operating Life                  |                     | 50000 cycles min.                                                                                                                                                                        |
| Temperature Range               |                     | -10 °C to +70 °C                                                                                                                                                                         |
| Heat Resistance                 |                     | +80 °C for 96 hours                                                                                                                                                                      |
| Low Temperature Resistance      |                     | -25 °C for 96 hours                                                                                                                                                                      |
| Humidity Resistance             |                     | +40 °C 90 % to 95 % RH for 96 hours                                                                                                                                                      |
| Minimum Quantity/Packing Unit   | ESE24MH, MV, SV, SH | 200 pcs. Polyethylene Bag (Bulk) <sup>*1</sup>                                                                                                                                           |
|                                 | ESE24MH□T           | 1000 pcs. Embossed Taping (Reel Pack) <sup>*2</sup>                                                                                                                                      |
|                                 | ESE24MV□T           | 500 pcs. Embossed Taping (Reel Pack)                                                                                                                                                     |
| Quantity/Carton                 | ESE24MH, MV, SV, SH | 10000 pcs. Polyethylene Bag (Bulk)                                                                                                                                                       |
|                                 | ESE24MH□T           | 6000 pcs. Embossed Taping (Reel Pack)                                                                                                                                                    |
|                                 | ESE24MV□T           | 3000 pcs. Embossed Taping (Reel Pack)                                                                                                                                                    |

<sup>\*1</sup> ESE24SH type: 160 pcs. (Polyethylene Bag), 8000 pcs. (Reel Pack)

<sup>\*2</sup> ESE24SV, ESE24SH are excluded

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.

00 Oct. 2012

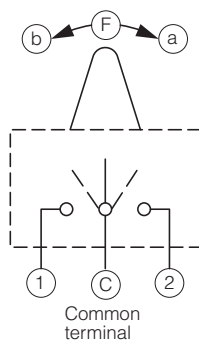
## ■ Dimensions in mm (not to scale)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>No. 1</b> ESE24SV3 Vertical type for wave soldering<br/>1-pole 2-throws</p> <p>Top view dimensions: 7.5, 4.3, 2.7, 2.5, 2.5, 2.90, 6-<math>\phi 1.10^{+0.05}_0</math>, 2.50, 2.50.</p> <p>Side view dimensions: 7.05 to 7.55 (Pushing position), 4.45 (Rotative center), 7.5, 4.3, 2.7, 2.9, 1.0, 3.0, 1.0, 1.4, 2.7, 0.3, 2.9, 3.8.</p> <p>Front view dimensions: 68°/26°, 29°/24°, 5.6, 0.2, 8.05 (ON starting position), 6.1 (Full position), 8.55, 1.0, 2.5, 2.5.</p> <p>PWB mounting hole for reference (Pitch tolerance: <math>\pm 0.05</math>) (PWB thickness=0.8)</p>    | <p><b>No. 2</b> ESE24SH1 Horizontal type for wave soldering<br/>1-pole 2-throws</p> <p>Top view dimensions: 8.4, 7.25, 2.5, 2.5, 1.6, 2.55, 2.75, 2.50, 2.50, 7.16, 2-<math>\phi 1.20^{+0.05}_0</math>, 3-<math>\phi 1.10^{+0.05}_0</math>.</p> <p>Side view dimensions: 3.55 to 4.05 (Pushing position), 0.95 (Rotative center), 7.5, 4.3, 2.7, 2.9, 1.0, 3.0, 1.0, 1.4, 2.7, 0.3, 2.9, 3.8.</p> <p>Front view dimensions: 68°/26°, 29°/24°, 5.6, 0.2, 8.05 (ON starting position), 6.1 (Full position), 8.55, 1.0, 2.5, 2.5.</p> <p>PWB mounting hole for reference (Pitch tolerance: <math>\pm 0.05</math>) (PWB thickness=0.8)</p>                                                          |
| <p><b>No. 3</b> ESE24MV1 Vertical type for reflow soldering<br/>1-pole 2-throws<br/>ESE24MV1T (Embossed Taping)</p> <p>Top view dimensions: 5.50, 3.60, 5.80, 2.50, 2.50, 6-1.40, 2-<math>\phi 1.10^{+0.05}_0</math>.</p> <p>Side view dimensions: 7.05 to 7.55 (Pushing position), 4.45 (Rotative center), 7.5, 4.3, 2.7, 2.9, 1.0, 3.0, 1.0, 1.4, 2.7, 0.3, 2.9, 3.8.</p> <p>Front view dimensions: 68°/26°, 29°/24°, 5.6, 0.2, 8.05 (ON starting position), 6.1 (Full position), 8.55, 1.0, 2.5, 2.5.</p> <p>PWB mounting hole for reference (Tolerance: <math>\pm 0.05</math>)</p> | <p><b>No. 4</b> ESE24MH1 Horizontal type for reflow soldering<br/>1-pole 2-throws<br/>ESE24MH1T (Embossed Taping)</p> <p>Top view dimensions: 0.25, 7.25, 0.25, 2.00, 7.50, 2.00, 1.60, 7.25, 2.00, 1.60, 4.50, 2.20, 2.50, 2.50, 3-1.40, 2-<math>\phi 0.70</math> (hole), positioning boss.</p> <p>Side view dimensions: 0.25 (Rotative center), 2.35 to 2.85 (Pushing position), 1.5, 7.5, 1.5, 4.3, 2.7, 2.9, 1.0, 3.0, 1.0, 1.4, 2.7, 0.3, 2.9, 3.8.</p> <p>Front view dimensions: 68°/26°, 29°/24°, 5.6, 0.2, 8.05 (ON starting position), 6.1 (Full position), 8.55, 1.0, 2.5, 2.5.</p> <p>PWB mounting hole for reference (Tolerance: <math>\pm 0.05</math>)</p> <p>Positioning boss</p> |

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## Circuit Diagram

1-pole 2-throws (N . O)

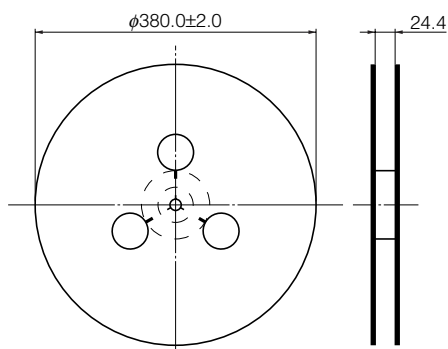


| Terminal No.<br>Lever position | ① | c | ② |
|--------------------------------|---|---|---|
| F                              |   | ○ |   |
| a                              | ○ | ○ |   |
| b                              |   | ○ | ○ |

## Packaging Specifications

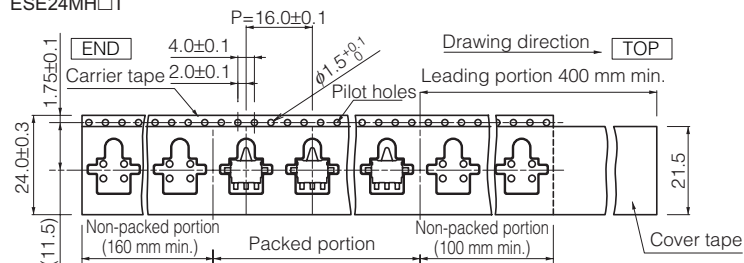
Standard Reel Dimensions in mm (not to scale)

### Taping Reel



### Embossed Carrier Taping

ESE24MH□T



ESE24MV□T

