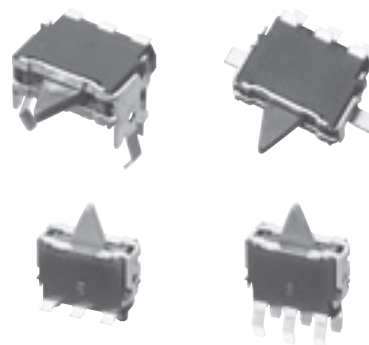


ESE24 Detector Switches

Type: **ESE24**

Bidirectional operation, midpoint auto-return Type



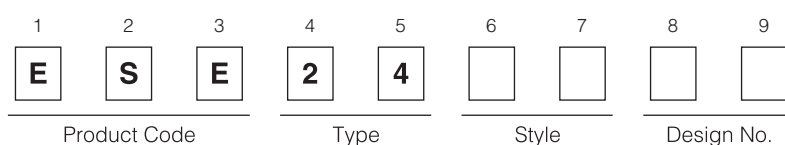
■ Features

- 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



| 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 μ A 3 V DC to 10 mA 5 V DC (Resistive load) | |
| Contact Resistance | 500 m Ω max. (Initial) | |
| Insulation Resistance | 100 M Ω min. (at 100 V DC for 1 minute) | |
| Dielectric Withstanding Voltage | 100 V AC (50 Hz or 60 Hz) for 1 minute | |
| Operating Force | 350 mN max. | |
| Mounting Height | <ul style="list-style-type: none"> · ESE24SV Type 5.6 mm · ESE24SH Type 4.65 mm · ESE24MV Type 5.6 mm · ESE24MH Type 3.0 mm | |
| Poles and Throws | 1-pole 2-throws (OFF at midpoint) | |
| Full Travel (Pushing distance) | <ul style="list-style-type: none"> · ESE24SV Type 6.1 mm (2.45 mm) · ESE24SH Type 2.6 mm (2.45 mm) · ESE24MV Type 6.1 mm (2.45 mm) · ESE24MH Type 1.4 mm (2.45 mm) | |
| Operating Life | 50,000 cycles min. | |
| Temperature Range | -10 °C to +70 °C (Standard), -40 °C to +85 °C (Automotive) | |
| 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)* ¹ |
| | ESE24MH□T | 1,000 pcs. Embossed Taping (Reel Pack)* ² |
| | ESE24MV□T | 500 pcs. Embossed Taping (Reel Pack) |
| Quantity/Carton | ESE24MH, MV, SV, SH | 10,000 pcs. Polyethylene Bag (Bulk) |
| | ESE24MH□T | 6,000 pcs. Embossed Taping (Reel Pack) |
| | ESE24MV□T | 3,000 pcs. Embossed Taping (Reel Pack) |

*¹ ESE24SH type: 160 pcs. (Polyethylene Bag), 8,000 pcs. (Reel Pack)
 *² 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.

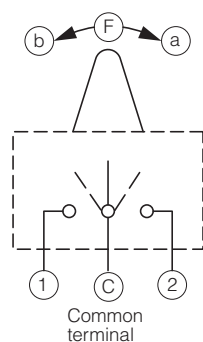
■ Dimensions in mm (not to scale)

| | |
|---|--|
| <p>No. 1 ESE24SV3 Vertical type for wave soldering 1-pole 2-throws</p> <p>7.05 to 7.55 (Pushing position) 4.45 (Rotative center)</p> <p>PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8)</p> <p>6-$\phi 1.10^{+0.05}_0$</p> <p>7.5 4.3 2.7 2.9 2.5 2.5 1.0 3.0 1.0 2.9 3.8 0.3 1.4 2.7 5.6 0.2 6.1 (Full position) 8.05 (ON starting position) 8.55 29°24' 68°26'</p> | <p>No. 2 ESE24SH1 Horizontal type for wave soldering 1-pole 2-throws</p> <p>8.4 7.25 2.5 2.5 1.6 2.55 2.75 3.55 to 4.05 (Pushing position) 0.95 (Rotative center)</p> <p>PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8)</p> <p>2-$\phi 1.20^{+0.05}_0$ 3-$\phi 1.10^{+0.05}_0$</p> <p>7.5 4.3 2.7 2.6 (Full position) 4.55 (ON starting position) 5.05 3.5 4.65 3.65 1.0 3.0 1.65 2.1 10.2 29°24' 68°26'</p> |
| <p>No. 3 ESE24MV1 Vertical type for reflow soldering 1-pole 2-throws ESE24MV1T (Embossed Taping)</p> <p>7.05 to 7.55 (Pushing position) 4.45 (Rotative center)</p> <p>PWB mounting hole for reference (Tolerance: ± 0.05)</p> <p>2-$\phi 1.10^{+0.05}_0$</p> <p>5.50 3.60 5.80 2.50 2.50 6-1.40 7.5 4.3 2.7 2.9 2.5 2.5 1.0 3.0 1.0 4.0 5.4 5.6 0.2 6.1 (Full position) 8.05 (ON starting position) 8.55 29°24' 68°26'</p> | <p>No. 4 ESE24MH1 Horizontal type for reflow soldering 1-pole 2-throws ESE24MH1T (Embossed Taping)</p> <p>0.25 7.25 0.25 2.00 7.50 2.00 1.60 4.50 2.20 2.50 2.50 3-1.40 PWB mounting hole for reference (Tolerance: ± 0.05)</p> <p>2-$\phi 0.70$ (Hole) positioning boss</p> <p>1.5 7.5 1.5 4.3 2.7 2.9 2.5 2.5 1.0 3.0 0.5 2.0 1.0 0.6 0.1 C0.2 1.4 3.35 (ON starting position) 4.7 1.6 3.85 1.2 0.9 0.2 29°24' 68°26'</p> |

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.

Circuit Diagram

1-pole 2-throws (N . O)

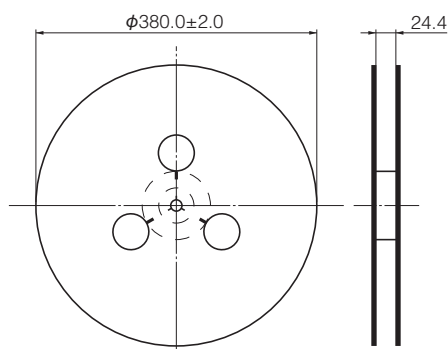


| Terminal No. Lever position | 1 | c | 2 |
|--------------------------------|---|---|---|
| F | | ○ | |
| a | ○ | ○ | |
| b | | ○ | ○ |

Packaging Specifications

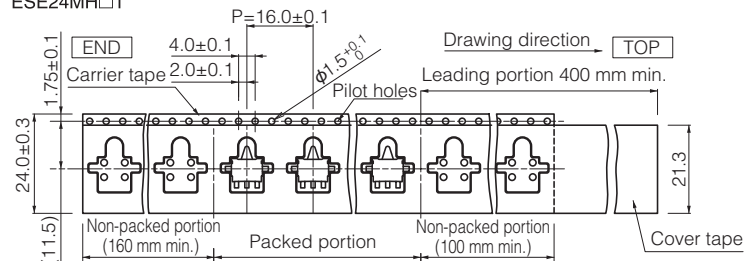
Standard Reel Dimensions in mm (not to scale)

Taping Reel



Embossed Carrier Taping

ESE24MH□T



ESE24MV□T

