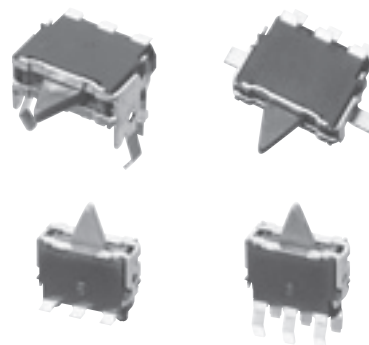


ESE24 Detector Switches

Type: **ESE24**

Bidirectional operation, midpoint auto-return Type



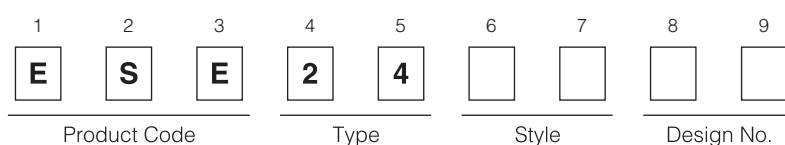
■ Features

- 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	· 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)	· 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.

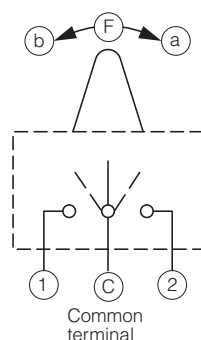
■ Dimensions in mm (not to scale)

No. 1 ESE24SV3 Vertical type for wave soldering 1-pole 2-throws 7.05 to 7.55 (Pushing position) 4.45 (Rotative center) PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8) 6-$\phi 1.10^{+0.05}_0$ 2.50 2.50 2.90 7.5 4.3 2.7 29° 24' 68° 26' 5.6 0.2 6.1 (Full position) 8.05 (ON starting position) 8.55 1.0 2.5 2.5 1.0 2.9 3.8 0.3 1.4 2.7 3.0 1.0	No. 2 ESE24SH1 Horizontal type for wave soldering 1-pole 2-throws 8.4 7.25 2.5 2.5 1.6 2.55 2.75 1.0 2.50 2.50 7.16 2-$\phi 1.20^{+0.05}_0$ 3-$\phi 1.10^{+0.05}_0$ 3.55 to 4.05 (Pushing position) 0.95 (Rotative center) PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8) 7.5 4.3 2.7 29° 24' 68° 10.2 2.6 (Full position) 4.55 (ON starting position) 5.05 3.5 4.65 3.65 1.0 1.0 3.0 1.65 3.0
No. 3 ESE24MV1 Vertical type for reflow soldering 1-pole 2-throws ESE24MV1T (Embossed Taping) 7.05 to 7.55 (Pushing position) 4.45 (Rotative center) PWB mounting hole for reference (Tolerance: ± 0.05) 2-$\phi 1.10^{+0.05}_0$ 5.50 3.60 5.80 2.50 2.50 6-1.40 1.0 2.5 2.5 1.0 5.5 7.5 4.3 2.7 29° 24' 68° 26' 5.6 6.1 (Full position) 8.05 (ON starting position) 8.55 1.0 4.0 5.4 3.0 1.0	No. 4 ESE24MH1 Horizontal type for reflow soldering 1-pole 2-throws ESE24MH1T (Embossed Taping) 0.25 7.25 0.25 2.00 7.50 2.00 1.60 7.25 2.00 1.60 2-$\phi 0.70$ (Hole) 2.50 2.50 3-1.40 2.20 4.50 1.60 1.60 3.0 0.5 2.0 1.0 0.6 0.2 0.1 1.5 7.5 1.5 4.3 2.7 29° 24' 68° 26' 0.2 0.9 1.2 1.6 3.85 4.7 1.5 1.4 (Full position) 3.35 (ON starting position) 0.25 (Rotative center) 2.35 to 2.85 (Pushing position) 1.0 2.5 2.5 1.0 0.1 Positioning boss PWB mounting hole for reference (Tolerance: ± 0.05)

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)

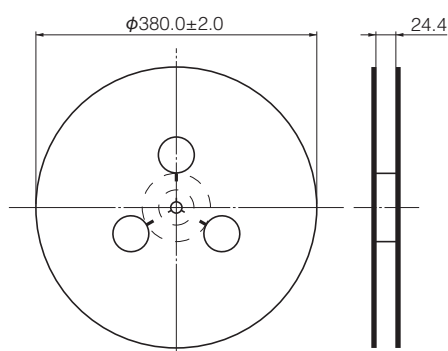


Terminal No. Lever position	①	c	②
(F)		○	
(a)	○	○	
(b)		○	○

Packaging Specifications

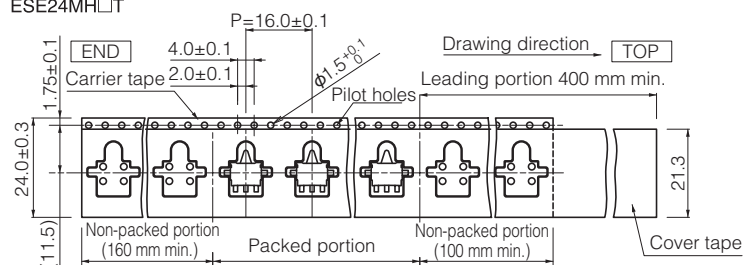
Standard Reel Dimensions in mm (not to scale)

Taping Reel



Embossed Carrier Taping

ESE24MH□T



ESE24MV□T

