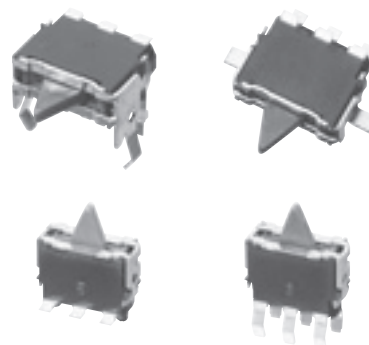


ESE24 Detector Switches

Type: **ESE24**

Bidirectional operation, midpoint auto-return Type



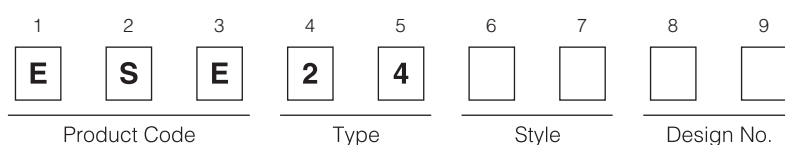
■ Features

- 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 $^{\circ}$ C to +70 $^{\circ}$ C (Standard), -40 $^{\circ}$ C to +85 $^{\circ}$ C (Automotive)	
Heat Resistance	+80 $^{\circ}$ C for 96 hours	
Low Temperature Resistance	-25 $^{\circ}$ C for 96 hours	
Humidity Resistance	+40 $^{\circ}$ 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.

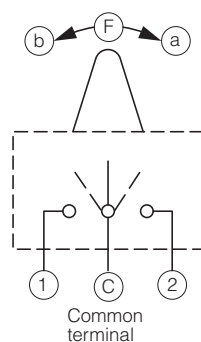
■ Dimensions in mm (not to scale)

No. 1 ESE24SV3 Vertical type for wave soldering 1-pole 2-throws Top view dimensions: 7.5, 4.3, 2.7, 2.5, 2.5, 2.90, 6-$\phi 1.10^{+0.05}_0$. Side view dimensions: 7.05 to 7.55 (Pushing position), 4.45 (Rotative center), 7.5, 4.3, 2.7, 2.5, 2.5, 1.0, 5.6, 0.2, 6.1 (Full position), 8.05 (ON starting position), 8.55, 3.0, 1.0, 0.3, 1.4, 2.7, 2.9, 3.8. Front view dimensions: 2.5, 2.5, 1.0. PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8)	No. 2 ESE24SH1 Horizontal type for wave soldering 1-pole 2-throws Top view dimensions: 8.4, 7.25, 2.5, 2.5, 1.6, 2.55, 2.75, 2.5, 2.5, 7.16, 2-$\phi 1.20^{+0.05}_0$, 3-$\phi 1.10^{+0.05}_0$. Side view dimensions: 3.55 to 4.05 (Pushing position), 0.95 (Rotative center), 7.5, 4.3, 2.7, 2.5, 2.5, 1.0, 5.6, 0.2, 6.1 (Full position), 8.05 (ON starting position), 8.55, 3.0, 1.0, 0.3, 1.4, 2.7, 2.9, 3.8. Front view dimensions: 2.5, 2.5, 1.0. PWB mounting hole for reference (Pitch tolerance: ± 0.05) (PWB thickness=0.8)
No. 3 ESE24MV1 Vertical type for reflow soldering 1-pole 2-throws ESE24MV1T (Embossed Taping) Top view dimensions: 7.5, 4.3, 2.7, 2.5, 2.5, 1.0, 5.5, 5.5, 3.6, 5.8, 2-$\phi 1.10^{+0.05}_0$, 2.5, 2.5, 6-1.40. Side view dimensions: 7.05 to 7.55 (Pushing position), 4.45 (Rotative center), 7.5, 4.3, 2.7, 2.5, 2.5, 1.0, 5.6, 0.2, 6.1 (Full position), 8.05 (ON starting position), 8.55, 3.0, 1.0, 0.3, 1.4, 2.7, 2.9, 3.8. Front view dimensions: 2.5, 2.5, 1.0. PWB mounting hole for reference (Tolerance: ± 0.05)	No. 4 ESE24MH1 Horizontal type for reflow soldering 1-pole 2-throws ESE24MH1T (Embossed Taping) Top view dimensions: 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-$\phi 0.70$ (Hole), positioning boss. Side view dimensions: 0.25 (Rotative center), 2.35 to 2.85 (Pushing position), 1.5, 7.5, 1.5, 4.3, 2.7, 2.5, 2.5, 1.0, 5.6, 0.2, 6.1 (Full position), 8.05 (ON starting position), 8.55, 3.0, 1.0, 0.3, 1.4, 2.7, 2.9, 3.8. Front view dimensions: 2.5, 2.5, 1.0. PWB mounting hole for reference (Tolerance: ± 0.05) Positioning boss

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Circuit Diagram

1-pole 2-throws (N . O)

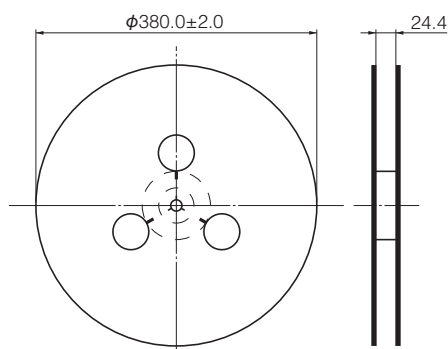


Terminal No. Lever position	1	c	2
(F)		○	
(a)	○	○	
(b)		○	○

Packaging Specifications

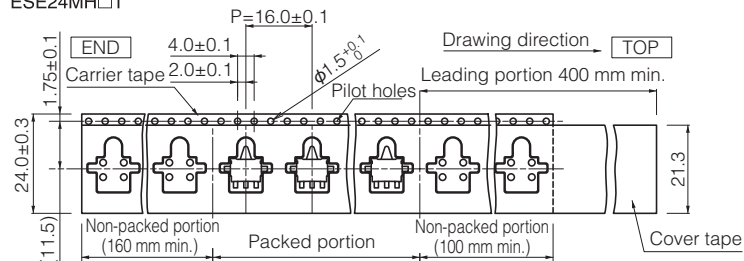
Standard Reel Dimensions in mm (not to scale)

Taping Reel

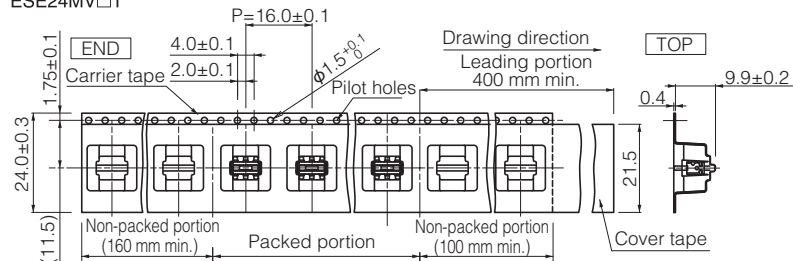


Embossed Carrier Taping

ESE24MH□T



ESE24MV□T



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panasonic:

[ESE-24CMV1TEE](#) [ESE-24MH1T](#) [ESE-24MV1](#) [ESE-24SH1](#) [ESE-24SV3](#) [ESE-24CSV3](#) [ESE-24MV1T](#) [ESE-24CSH1](#) [ESE-24CSV6](#) [ESE-24SH6](#) [ESE-24MV6T](#) [ESE-24SV6](#) [ESE-24CMH6T](#) [ESE-24MH6T](#) [ESE-24CMH1T](#) [ESE-24CMV6T](#) [ESE-24CSH6](#) [ESE-24CMV1T](#) [ESE-24CMV9T](#) [ESE-24CMH9T](#)