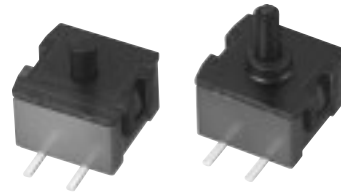


2NV Detector Switches

Type: **ESE21**

■ Features

- External dimensions : 3.4 mm×3.8 mm, Height 2.3 mm
- Light operating force
- Reflow soldering

■ Recommended Applications

- Detection of media in portable electronic equipment
- Detection of flaps (of folded body) for cellular phones

■ Explanation of Part Numbers

1	2	3	4	5	6	7	8	9
E	S	E	2	1				
Product Code			Type		Design No.			

■ Specifications

Rating	50 μ A 3 Vdc to 10 mA 5 Vdc (Resistive load)
Contact Resistance	500 m Ω max.
Insulation Resistance	100 M Ω min. (100 Vdc)
Dielectric Withstanding Voltage	100 Vac for 1 minute
Operating Force	300 mN max.
Mounting Height	2.3 mm
Poles and Throws	1-pole 1-throw
Full Travel (Pushing distance)	· N.O : Height=3.8 mm 2.3 mm (1.5 mm) · N.C : Height=3.6 mm 2.3 mm (1.3 mm) · N.O : Height=4.8 mm 3.3 mm (1.5 mm)
Operating Life	50000 cycles min.
Temperature Range	-10 °C to +60 °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	2000 pcs. Embossed Taping (Reel Pack)
Quantity/Carton	12000 pcs.

Type A N.O (H=3.8)	Part Numbers	Boss	Packaging Embossed Taping (Reel pack)	Type C N.O (H=4.8)	Part Numbers	Boss	Packaging Embossed Taping (Reel pack)
	ESE2121AT	Without Boss			ESE2131AT	Without Boss	
Type B N.C (H=3.6)	ESE2121BT	With Boss			ESE2131BT	With Boss	
	ESE2161AT	Without Boss					
	ESE2161BT	With Boss					

No. 1

without Boss
1-pole 1-throw

PWB land pattern for reference
(ESE2121AT)
View from A

PWB mounting hole for reference
(ESE2121BT)
View from A

Full travel
ON starting position

	H	H0
Type A	3.8 mm	3.5 mm
Type B	3.6 mm	3.3 mm

No. 2

with Boss
1-pole 1-throw

PWB land pattern for reference
(ESE2131AT)
View from A

PWB mounting hole for reference
(ESE2131BT)
View from A

Full travel
ON starting position

1-pole 1-throw (N . O)

1-pole 1-throw (N . C)

Taping Reel

Front view: A large circle with a diameter of $\phi 380.0 \pm 2.0$. Inside, there are three smaller circles arranged in a triangular pattern. A dashed circle is centered on the same point.

Side view: A cross-section of the reel. The total width is 16.4. The thickness of the tape is 2.0. The distance from the center of the reel to the edge of the tape is 2.0.

Embossed Carrier Taping

Top view: A cross-section of the carrier tape. The total width is 13.5. The tape has a thickness of 1.75 ± 0.1 . The distance from the center of the reel to the edge of the tape is 7.5 ± 0.1 . The distance between the centers of the pilot holes is $P = 8.0 \pm 0.1$. The distance between the centers of the carrier tape holes is 4.0 ± 0.1 . The distance between the centers of the pilot holes is 2.0 ± 0.1 . The distance between the centers of the carrier tape holes and the pilot holes is 1.5 ± 0.1 . The tape is divided into three sections: Non-packed portion (160 mm min.), Packed portion, and Non-packed portion (100 mm min.). The leading portion is 400 mm min. The drawing direction is indicated by an arrow pointing to the right. The cover tape is shown on the right side.

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