

6 mm Square Carbon Composition Trimmer Potentiometers, Dustproof (6FE)

Series: **EVND**

■ Dimensions in mm (not to scale)

● Side-adjust EVND2A

<p>No. 1</p> <p>Japan Malaysia</p>	<p>Knob color Orange yellow</p>
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● Top-adjust EVND8A

<p>No. 2</p> <p>Japan Malaysia</p>	<p>Knob color Orange yellow</p>
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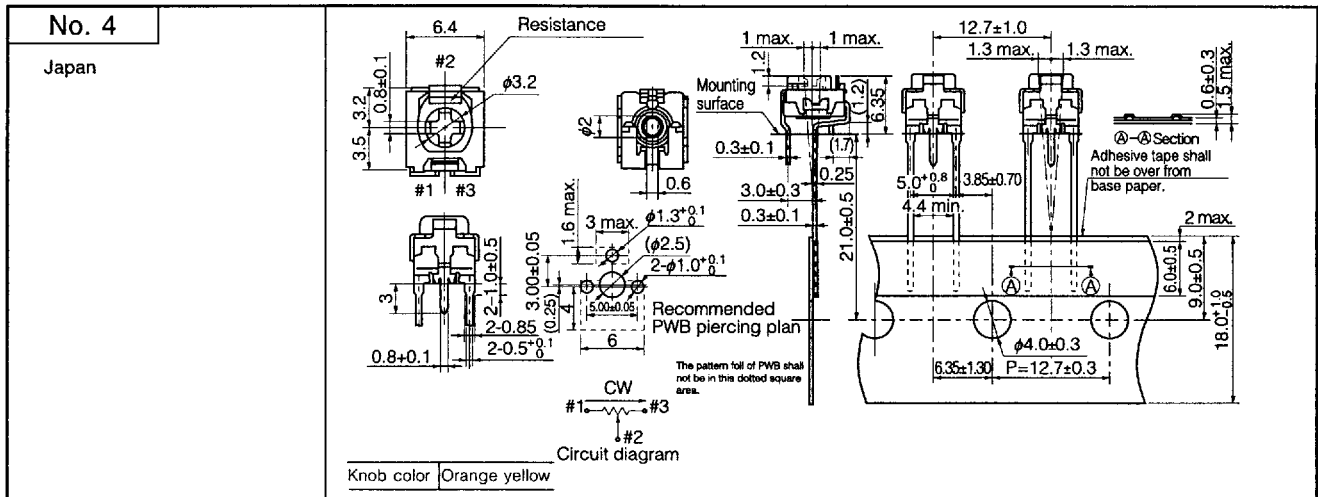
● Top-adjust, for Automatic Insertion (Magazine pack) EVND8M

<p>No. 3</p> <p>Japan</p>	<p>Knob color Orange yellow</p>
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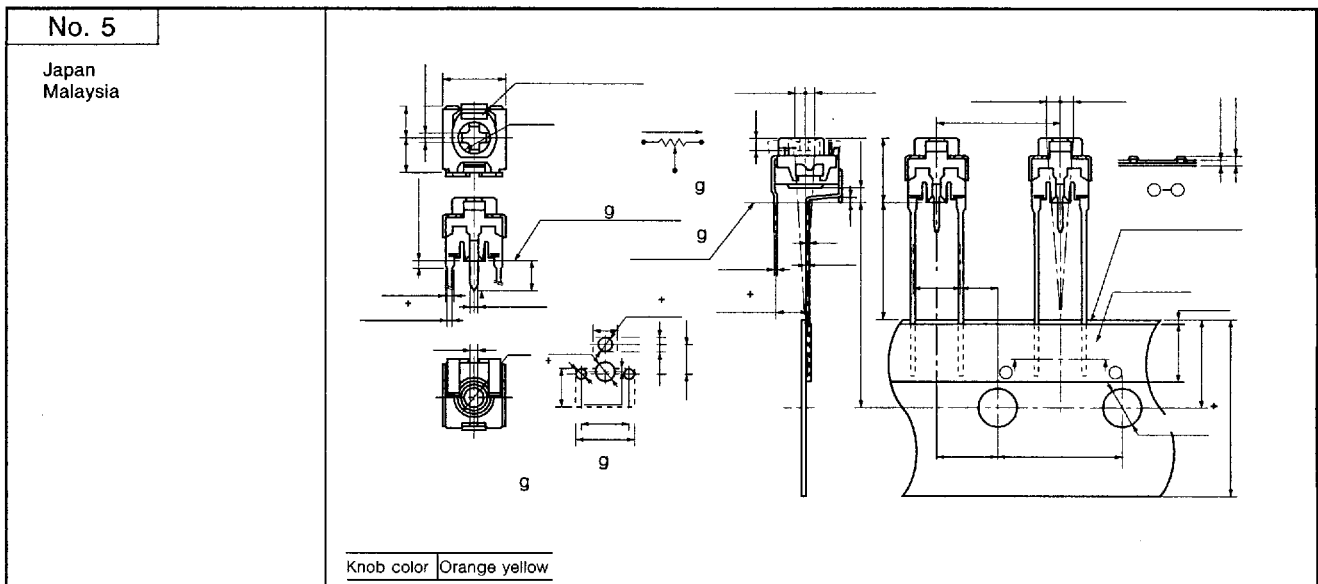
* All the terminals shall be inserted into the above piercing holes after bending by mounting machine.

- Radial Taping Products
- Based on EIAJ RC-1008
- Triangular terminal layout for better sitting

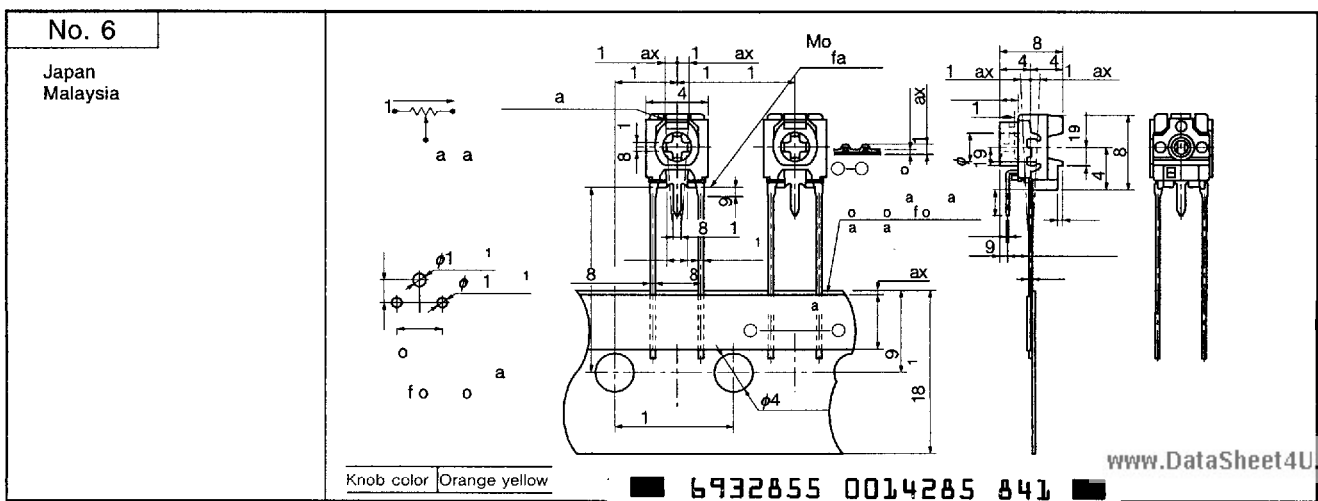
● Top-adjust EVNDJA



● Top-adjust EVNDXA



● Side-adjust EVNDCA



Common Specifications for Carbon Composition Trimmer Potentiometers

■ Electrical Specifications

1. Nominal Total Resistance and Tolerance

Type	Standard Nominal Total Resistance (Ω)											Available Range	Tolerance (%)	
	500	1 k	2 k	5 k	10 k	20 k	50 k	100 k	200 k	500 k	1 M			
6 mm Dustproof	○	○	○	○	○	○	○	○	○	○	○	○	100 Ω to 1 MΩ	±30

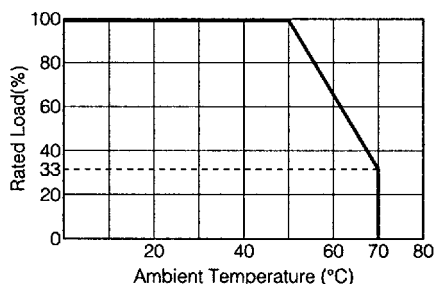
2. Power Rating and Voltage Rating

2-1. Power Rating

When the ambient temperature is within the following parameter (see table below), the maximum operating voltage which can be applied between terminal 1 and 3 is as follows. For potentiometers operated in ambient temperatures above 50 °C, Power Rating shall be derated in accordance with the figure below.

Type	Power Rating (W)	Max. Operating Voltage (V)	Ambient Temperature (°C)
6 mm Dustproof	0.1	R ≤ 500 kΩ: 50, R > 500 kΩ: 25	50 max.

Power Derating Curve



2-2. Voltage Rating

$$E = \sqrt{P \cdot R}$$

E=Voltage rating (V)

P=Power rating (W)

R=Nominal total resistance (Ω)

The voltage rating should be maximum operating voltage when E shall exceed maximum operating voltage shown in the table.

3. Taper

B (linear) only

4. Residual Resistance

Residual resistance is defined as the resistance value between terminal 2 and 3 when wiper is at full CW position or the resistance value between terminal 1 and 2 when wiper is at full CCW position. The following values shall be applied to the carbon composition trimmer potentiometer series.

Type	Nominal Total Resistance			Max. Value
	$R \leq 1 \text{ k}\Omega$	$1 \text{ k}\Omega < R \leq 2 \text{ k}\Omega$	$R > 2 \text{ k}\Omega$	
6FF/6FE	30 Ω max.	60 Ω max.	3 % max.	200 Ω

■ Mechanical Specifications

1. Total Rotation Angle

Type	Total Rotation Angle (°)
6FF/6FE	210±20

2. Rotation Torque

Type	Rotation Torque
6FF/6FE	2 to 25 mN·m (20 to 250 gf·cm)

3. Shaft Stopper Strength

Type	Stopper Strength [N·m (kgf·cm)]
6FF	Surface: 0.050 (0.5) min. Reverse side: 0.035 (0.35) min.
6FE	Surface: 0.075 (0.75) min. Reverse side: 0.035 (0.35) min.

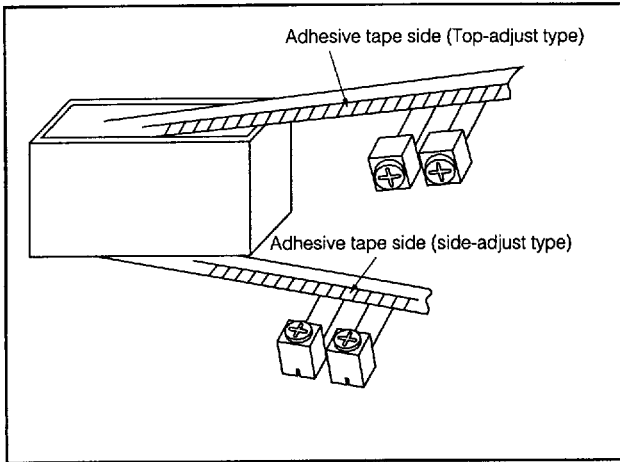
4. Soldering Heat

No electrical discontinuity shall be caused after soldering heat test shown below.

Type	Soldering Heat (°C)	Soldering Time (s)
6FF/6FE	240 to 280	5 max.
	over 280 to 300	3 max.

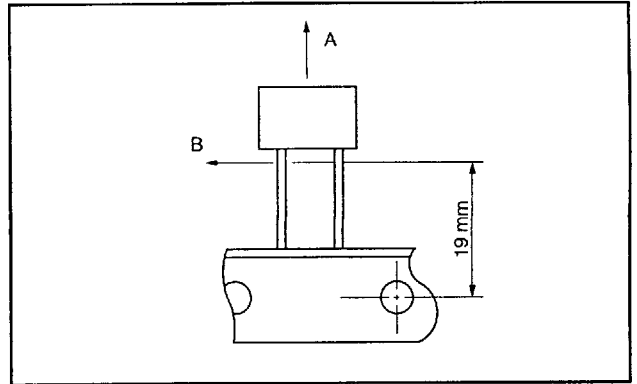
■ Packaging Specifications for Radial Taping

● Drawing-out of taped products



Drawing-out can be from top or bottom of inner carton.

● Pull-strength of taped products



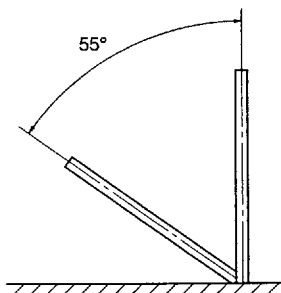
- Taped products shall not be fully drawn-out from the tape when pulling off in direction A at 5.0 N (500 gf) max.
- Taped products shall not be drawn-out from the tape when pulling off in direction B at 1.0 N (100 gf) for 3 seconds.

■ Magazine for Automatic Insertion

6FE	70 pcs. (length 508)		<p>Material : Polycarbonate Thickness: 0.5 mm</p>
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Consult us regarding the magazine for automatic insertion.

Setting Angle



The parts will slide down within the angle shown in the drawing at left.

Storage: Avoid storing at high temperature, high humidity or in a corrosive gas atmosphere. Preferable storage in the magazines is at lower than 40 °C for 240 hours max.

Minimum Quantity/Packing Unit

Please place an order by an integer multiple of the Quantity/Carton.

Product Item (Series, Type)	Part No.	Packaging	Quantity/ Carton (pcs.)	Min. Q'ty/ Packing Unit (pcs.)	Notes
6 mm Square Carbon Composition Trimmer Potentiometers, Dustproof with Knob Protection (6FF) Type: EVNCYA	EVNCYA	Radial Taping	10000	1000	
6 mm Square Carbon Composition Trimmer Potentiometers, Dustproof (6FE) Type: EVND	EVND2A EVND8A	Vinyl Bag	5000	500	
	EVND8M	Magazine Pack	9800	70	
	EVNDJA EVNDXA EVNDCA	Radial Taping	10000	1000	