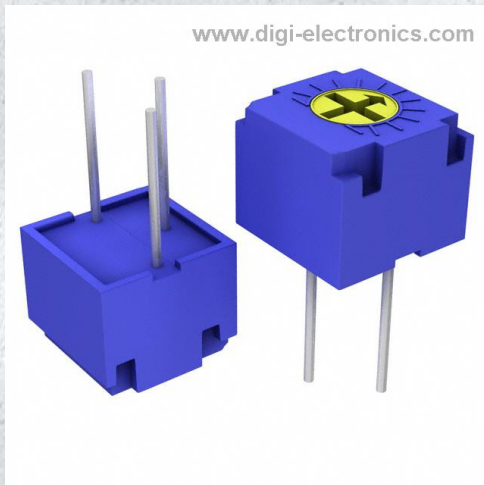


# CT6R202 Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	CT6R202-DG
Manufacturer	<a href="#">Vishay Beyschlag/Draloric/BC Components</a>
Manufacturer Product Number	CT6R202
Description	TRIMMER 2K OHM 0.5W PC PIN TOP
Detailed Description	2 kOhms 0.5W, 1/2W PC Pins Through Hole Trimmer Potentiometer Cermet 1.0 Turn Top Adjustment

This model CT6R202 is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

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Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

CT6R202

Series:

CT6

Resistance:

2 kOhms

Tolerance:

±10%

Number of Turns:

1

Resistive Material:

Cermet

Termination Style:

PC Pins

Manufacturer:

Vishay Beyschlag/Draloric/BC Components

Product Status:

Obsolete

Power (Watts):

0.5W, 1/2W

Temperature Coefficient:

±100ppm/°C

Adjustment Type:

Top Adjustment

Mounting Type:

Through Hole

Size / Dimension:

Square - 0.276" x 0.276" Face (7.00mm x 7.00mm)

## Environmental & Export classification

RoHS Status:

RoHS non-compliant

REACH Status:

REACH Unaffected

HTSUS:

8533.40.8050

Moisture Sensitivity Level (MSL):

1 (Unlimited)

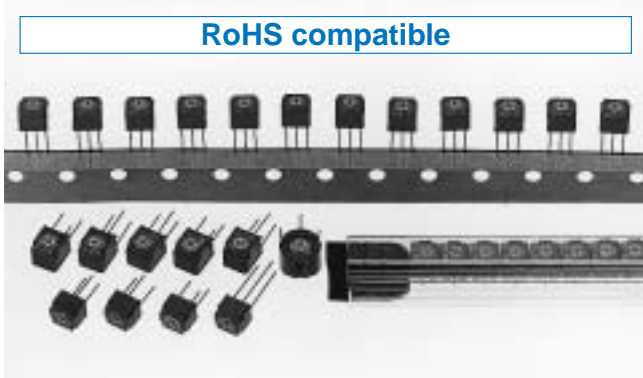
ECCN:

EAR99

# SINGLE TURN CERMET TRIMMERS

# CT-6

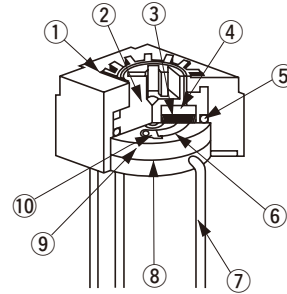
RoHS compatible



## FEATURES

- Lead-free soldering, Cadmium-free
- Various configurations to choose from
- Wide variety (14 types)
- "O" ring sealed and washable

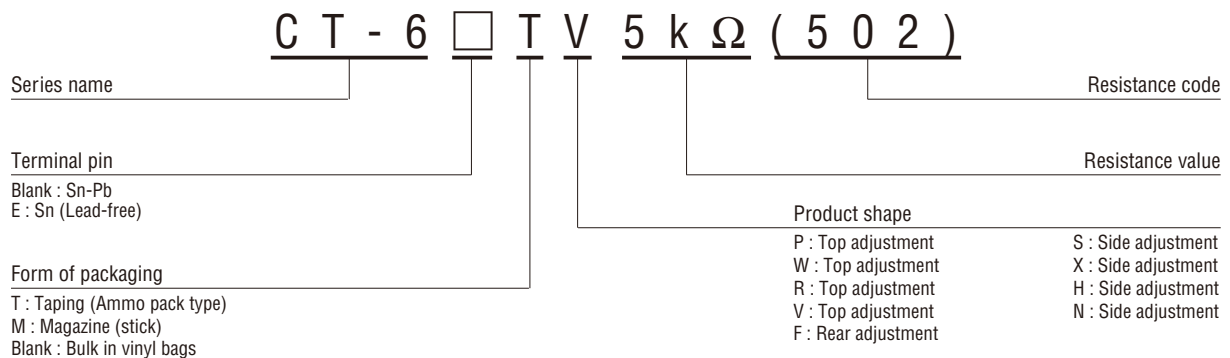
### INTERNAL STRUCTURE



Part name		Material	Flammability
①	Housing	PBT (Polybutyleneterephthalate)	UL-94V-0
②	Rotor		
③	Wiper	Multi metal alloy	—
④	Rubber cushion	Silicone rubber	
⑤	"O" ring	Silicone rubber	UL-94HB
⑥	Resistive element	RuO <sub>2</sub> cermet	—
⑦	Terminal pin	Sn-Pb Copper, Solder-plated	
		Sn Copper, Tin-plated	
⑧	Adhesive	Epoxy	UL-94V-0
⑨	Base element	Ceramic	—
⑩	Electrode	Ag-Pd cermet	

CFCs, Halon, Carbon tetrachloride and designated bromic flame retardant PBBs and PBBs are not used in our products.

## PART NUMBER DESIGNATION










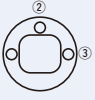


✳ Please refer to the LIST OF PART NUMBERS when placing orders.

# CT-6

## CERMET TRIMMERS

### LIST OF PART NUMBERS

Adjustment position	Shape of terminal (Top view)	Form of packaging						Remarks
		Taping		Magazine (stick)		Vinyl bag		
		Sn-Pb	Sn (Lead-free)	Sn-Pb	Sn (Lead-free)	Sn-Pb	Sn (Lead-free)	
Top adjustment 		CT-6TP Ammo pack type	CT-6ETP Ammo pack type	CT-6MP	CT-6EMP	CT-6P	CT-6EP	The pin length of CT-6TP & CT-6MP is different from CT-6P.
						CT-6W	CT-6EW	—
						↻ CT-6R	↻ CT-6ER	—
		CT-6TV Ammo pack type	CT-6ETV Ammo pack type			CT-6V	CT-6EV	—
Side adjustment (↑ Adjustment direction)				CT-6MS	CT-6EMS	CT-6S	CT-6ES	The pin length of CT-6MS is different from CT-6S.
						CT-6X	CT-6EX	—
		CT-6TH Ammo pack type	CT-6ETH Ammo pack type			CT-6H	CT-6EH	The pin length of CT-6TH is different from CT-6H.
						CT-6N	CT-6EN	—
Rear adjustment						↻ CT-6F	↻ CT-6EF	—
Pieces in package		1000 pcs./taping		75 pcs./stick		50 pcs./pack		—

☒ : Not manufactured

The products indicated by ↻ mark are manufactured upon receipt of order basis.

#### <Nominal resistance values>

Fig. 1

↻ 10 Ω	↻ 20 Ω	50 Ω	100 Ω	200 Ω	500 Ω
1 kΩ	2 kΩ	5 kΩ	10 kΩ	20 kΩ	50 kΩ
100 kΩ	200 kΩ	500 kΩ	1 MΩ	2 MΩ	

\* : The above part numbers are all available with the respective combination of <Nominal resistance values> (Fig. 1).

\* : Verify the above part numbers when placing orders.

\* : Taping and magazine specifications are not sold separately and must be purchased in taping or stick units.

# CT-6

## CERMET TRIMMERS

### ELECTRICAL CHARACTERISTICS

Nominal resistance range	10 Ω ~ 2 MΩ
Resistance tolerance	± 10 %
Power ratings	0.5 W (70 °C) 0 W (120 °C)
Resistance law	Linear law (B)
Maximum input voltage	DC200 V or power rating, whichever is smaller
Maximum wiper current	100 mA or power rating, whichever is smaller
Effective electrical angle	220 ° (1 turn)
End resistance	1 % or 2 Ω, whichever is greater
C.R.V.	1 % or 3 Ω, whichever is greater
Operating temp. range	-55 ~ 120 °C
Temp. coefficient	10 Ω ~ 20 Ω : ± 250 10 <sup>-6</sup> /°C maximum 50 Ω ~ 2 MΩ : ± 100 10 <sup>-6</sup> /°C maximum
Insulation resistance	1000 MΩ minimum (DC500 V)
Dielectric strength	AC900 V, 60 s
Net weight	Approx. 0.51 g (CT-6P, W, R, V, EP, EW, ER, EV) Approx. 0.65 g (CT-6S, X, H, N, ES, EX, EH, EN) Approx. 0.92 g (CT-6F, EF)

### MECHANICAL CHARACTERISTICS

Mechanical angle	260 ° (1 turn)
Operating torque	2 ~ 20 mN·m {20 ~ 204 gf·cm}
Stop strength	50 mN·m {510 gf·cm} minimum
Rotational life	200 cycles [ $\Delta R/R \leq \pm (2 \Omega + 3 \%)$ ]
Terminal strength	10 N {1.02 kgf} minimum (Tensile strength)
Thrust to rotor	10 N {1.02 kgf} minimum
Solderability	Sn-Pb : 235 °C, 2 s Sn (Lead-free) : 245 ± 3 °C, 2 ~ 3 s

{ } : Reference only

### ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions	Specifications
Thermal shock	-65 ~ 125 °C (0.5 h), 5 cycles	[ $\Delta R/R \leq 1 \%$ ] [S.S. $\leq 1 \%$ ]
Humidity	-10 ~ 65 °C (Relative humidity 80 ~ 98 %), 10 cycles, 240 h	[ $\Delta R/R \leq 2 \%$ ]
Shock	981 m/s <sup>2</sup> , 6 ms 6 directions for 3 times each	[ $\Delta R/R \leq 1 \%$ ] [S.S. $\leq 1 \%$ ]
Vibration	Amplitude 1.52 mm or Acceleration 196 m/s <sup>2</sup> , 10 ~ 2000 Hz, 3 directions, 12 times each	[ $\Delta R/R \leq 3 \%$ ] [S.S. $\leq 1 \%$ ]
Load life	70 °C, 0.5 W, 1000 h	[ $\Delta R/R \leq 3 \%$ ] [S.S. $\leq 1 \%$ ]
Low temp. operation	-55 °C, 2 h	[ $\Delta R/R \leq 2 \%$ ] [S.S. $\leq 2 \%$ ]
High temp. exposure	120 °C, 250 h	[ $\Delta R/R \leq 3 \%$ ] [S.S. $\leq 2 \%$ ]
Immersion seal	85 °C, 60 s	No leaks (No continuous bubbles)
Soldering heat	Sn-Pb : 350 °C, 3 s Sn Flow : 260 ± 3 °C, 5 ~ 6 s, two times maximum Manual soldering : 380 ± 10 °C, 3 ~ 4 s	[ $\Delta R/R \leq 1 \%$ ]

$\Delta R/R$  : Change in total resistance  
S.S. : Setting stability

### MAXIMUM INPUT RATINGS

Nominal resistance values (Ω)	Resistance code	Maximum input voltage (V)	Maximum wiper current (mA)
↻ 10	100	1.00	100
↻ 20	200	2.00	100
↻ 50	500	5.00	100
100	101	7.07	70.7
200	201	10.0	50.0
500	501	15.8	31.6
1 k	102	22.4	22.4
2 k	202	31.6	15.8
5 k	502	50.0	10.0
10 k	103	70.7	7.07
20 k	203	100	5.00
50 k	503	158	3.16
100 k	104	200	2.00
200 k	204	200	1.00
500 k	504	200	0.40
1 M	105	200	0.20
2 M	205	200	0.10

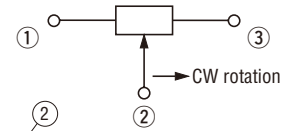
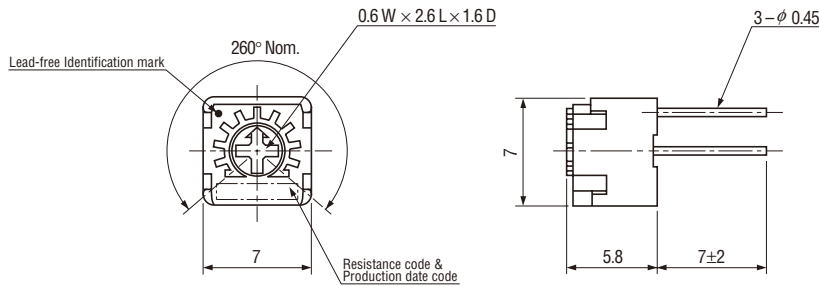
The products indicated by ↻ mark are manufactured upon receipt of order basis.

# CT-6 CERMET TRIMMERS

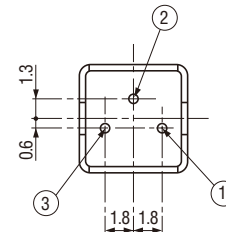
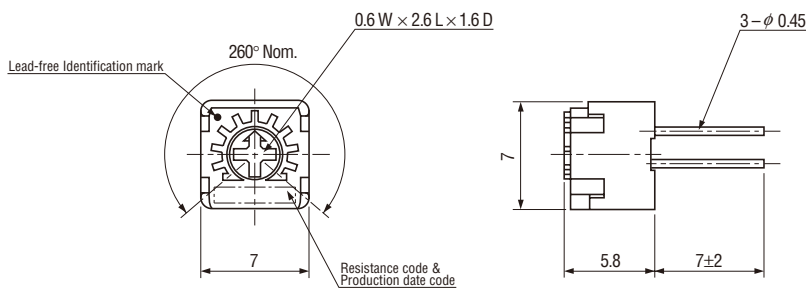
## OUTLINE DIMENSIONS

Unless otherwise specified, tolerance:  $\pm 0.3$  (Unit: mm)

### CT-6P, CT-6EP Top adjustment

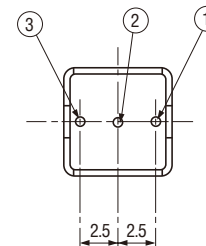
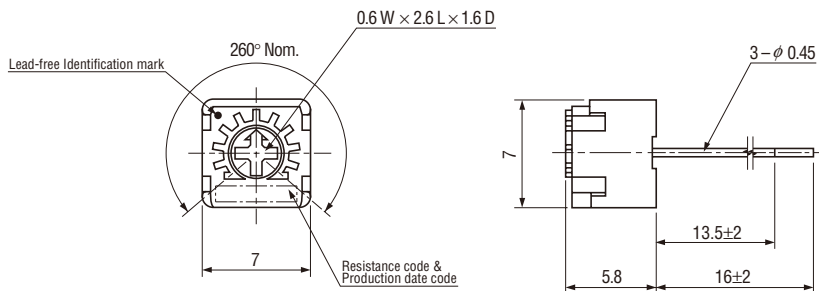


### CT-6W, CT-6EW Top adjustment

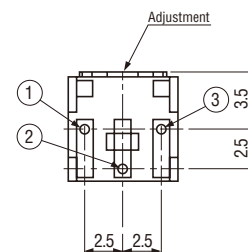
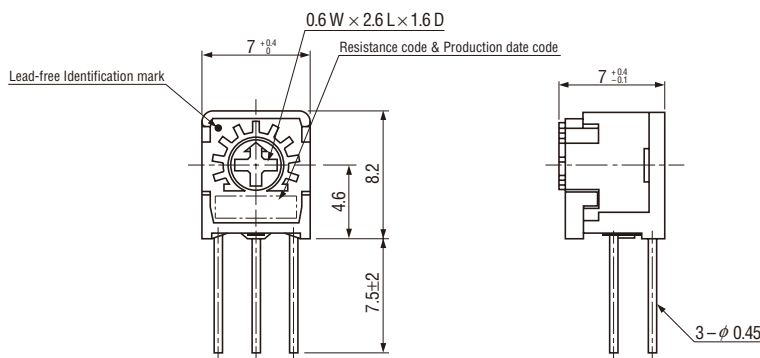


★ : Pin pitch in W type is different from P type.

### CT-6V, CT-6EV Top adjustment



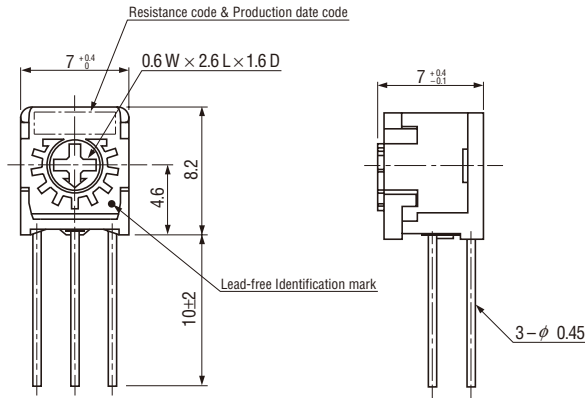
### CT-6S, CT-6ES Side adjustment



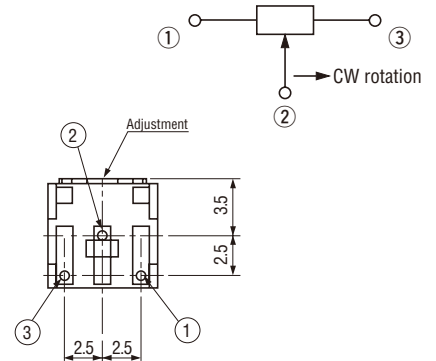
# CT-6 CERMET TRIMMERS

## OUTLINE DIMENSIONS

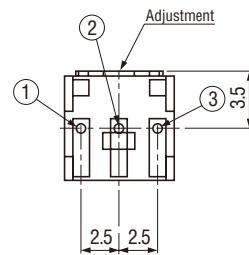
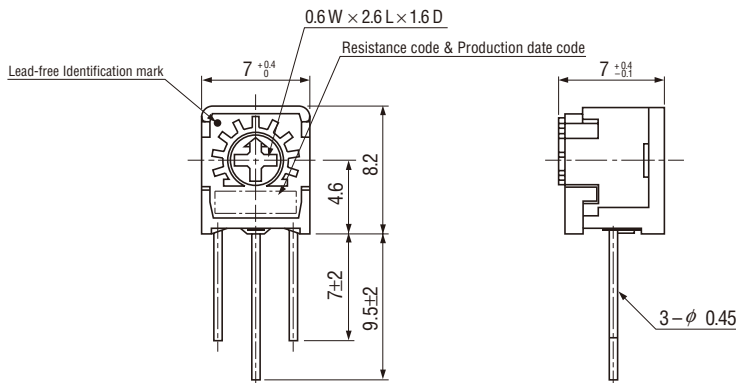
### CT-6X, CT-6EX Side adjustment



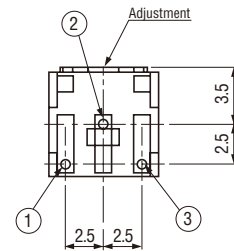
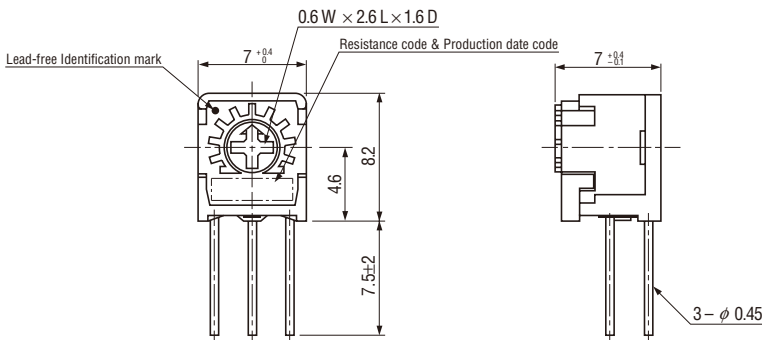
Unless otherwise specified, tolerance:  $\pm 0.3$  (Unit: mm)



### CT-6H, CT-6EH Side adjustment



### CT-6N, CT-6EN Side adjustment



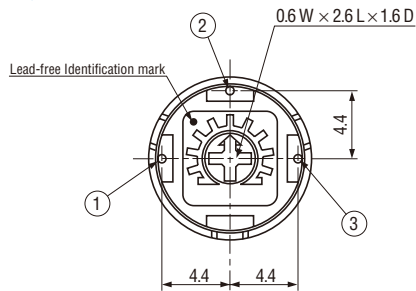
★ : Terminals ① & ③ position in N type is different from X type.

# CT-6

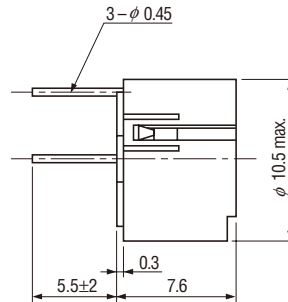
## CERMET TRIMMERS

### OUTLINE DIMENSIONS

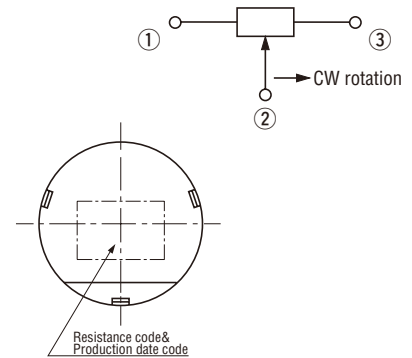
#### CT-6F, CT-6EF Rear adjustment



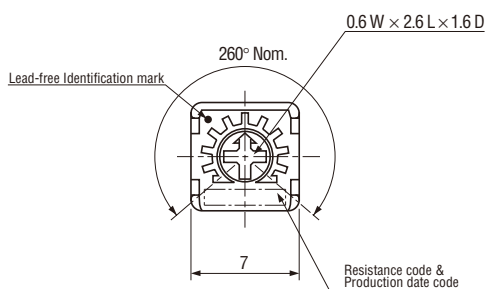
<Semi-standard products>



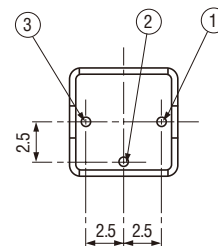
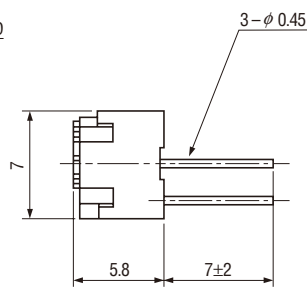
Unless otherwise specified, tolerance: ± 0.3 (Unit: mm)



#### CT-6R, CT-6ER Top adjustment



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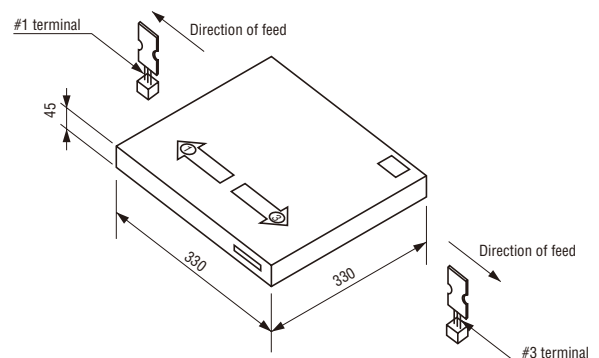
### PACKAGING SPECIFICATIONS

#### <Taping packaging specifications>

- Taping version is packaged in 1000 pcs. per reel.  
Orders will be accepted for units of 1000 pcs., i.e., 1000, 2000, 3000 pcs., etc.
- Taping version (ammo pack type) is boxed with one reel (1000 pcs.).



Ammo pack type



#### Ammo Pack

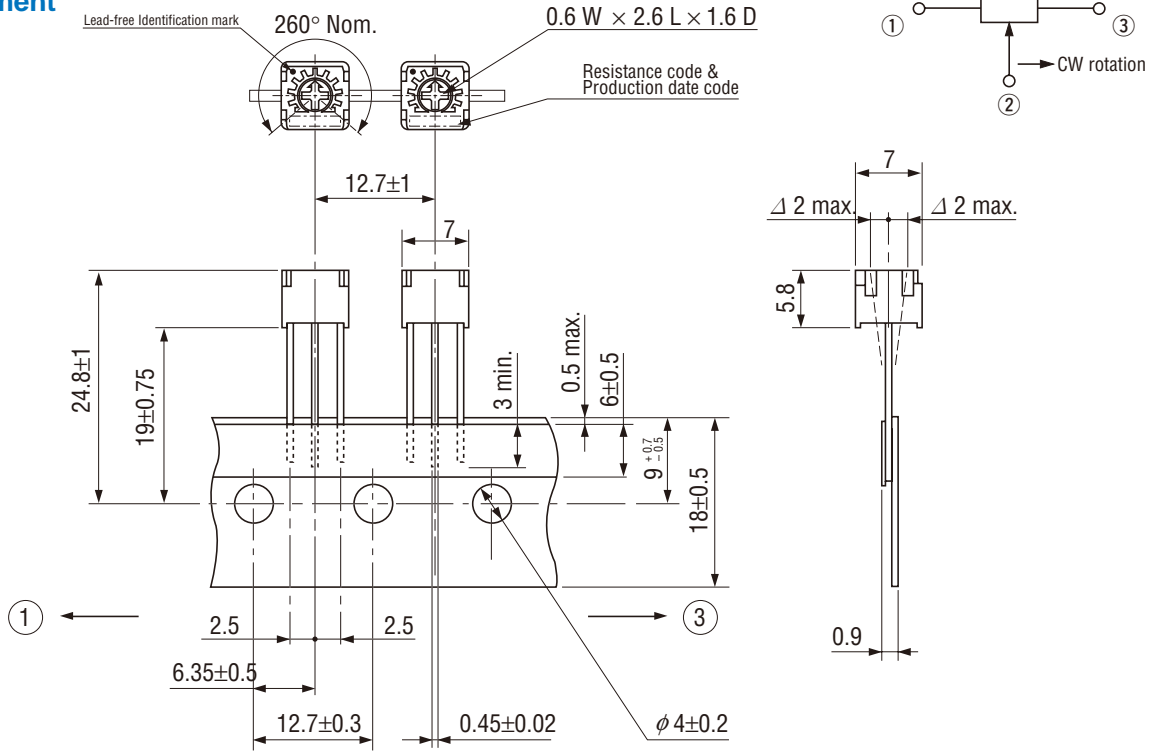
- Package size: 330 mm × 330 mm × 45 mm
- The leader and end of the tape have an empty part of minimum 300 mm respectively.
- There are two tape outlets on the package for different terminal alignment directions, for which details refer to the sketch above.  
(e.g.) When the tape is fed from the right outlet marked ③, #3 terminal comes out first.
- Gross weight of the boxing version
 

TV, ETV	: Approx. 840 g
TH, ETH	: Approx. 930 g
TP, ETP	: Approx. 850 g

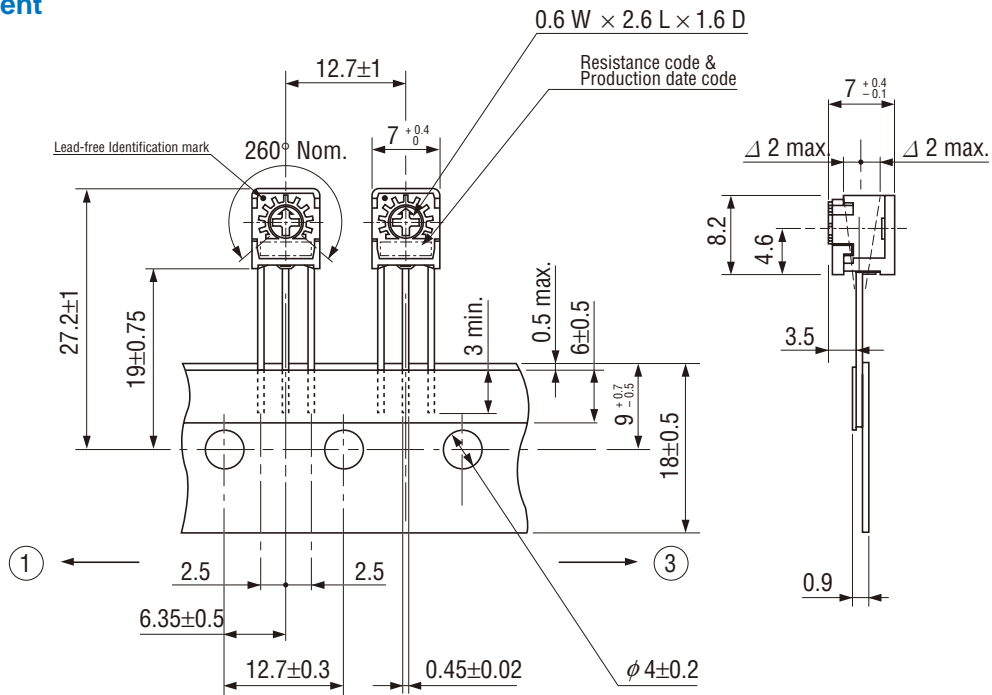
# CT-6 CERMET TRIMMERS

● **CT-6TV, CT-6ETV**  
Top adjustment

Unless otherwise specified, tolerance:  $\pm 0.3$  (Unit: mm)



● **CT-6TH, CT-6ETH**  
Side adjustment

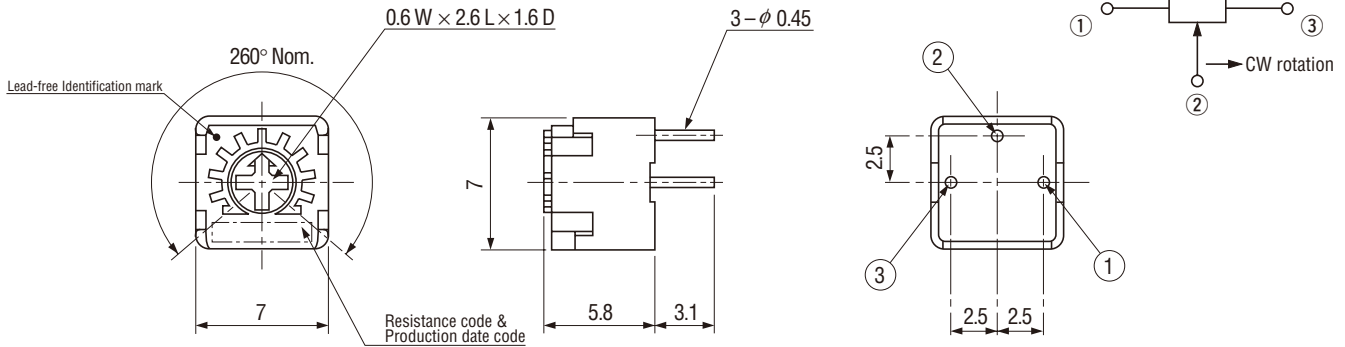




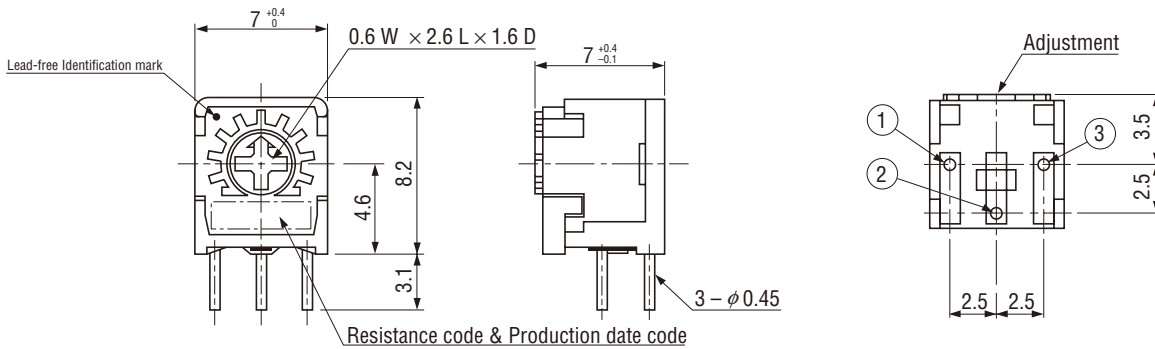
# CT-6 CERMET TRIMMERS

## ● CT-6MP, CT-6EMP Top adjustment

Unless otherwise specified, tolerance: ± 0.3 (Unit: mm)



## ● CT-6MS, CT-6EMS Side adjustment



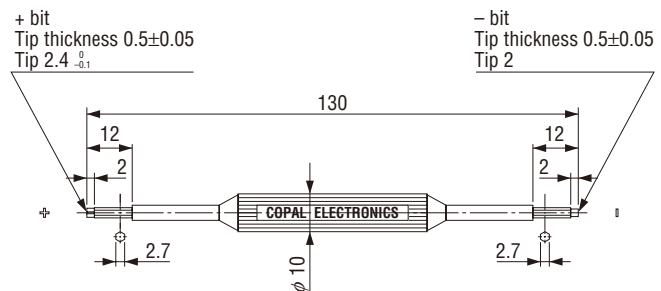
### <Vinyl bag packaging specifications>

- Unit of bulk in vinyl bag packaging is 50 pcs. per pack.
- Boxing of bulk in vinyl bags is performed with 200 pcs. (CT-6F, CT-6EF is 100 pcs.) per box.

## ■ ADJUSTMENT TOOL, MODEL TA-64

- Good for both minus and cross slot rotors / shafts.
- Recommended for use with the following copal trimmers.

Recommended models	
+ bit	- bit
CT-6	ST-4
FT-63	RJ-4
	RJ-6
	TM-7



Material : Polybutyleneterephthalate

Note : Please do not use the tool for purposes other than adjustment of electronic components.

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