

### FEATURES

- Carbon resistive element
- Polyester substrate
- Over-moulding manufacturing technique
- SMD or through hole
- Embossed Tape (for SMD), Tape on reel, Ammopack and Magazine packaging for automatic insertion and bulk for manual assembly
- Wiper positioned at 50%
- Both sides cross slot easy adjustment
- Accidental rotor movement protected
- Traceability insured through date code marking
- Assembly method:
  - Stand up
  - Lay down

### MECHANICAL SPECIFICATIONS

- Mechanical rotation angle:  $280^\circ \pm 10^\circ$
- Electrical rotation angle:  $245^\circ \pm 25^\circ$
- Torque: 0.2 to 3 Ncm. (0.28 to 4.2 in-oz)
- Stop torque: > 7.5 Ncm. ( 10.5 in-oz)

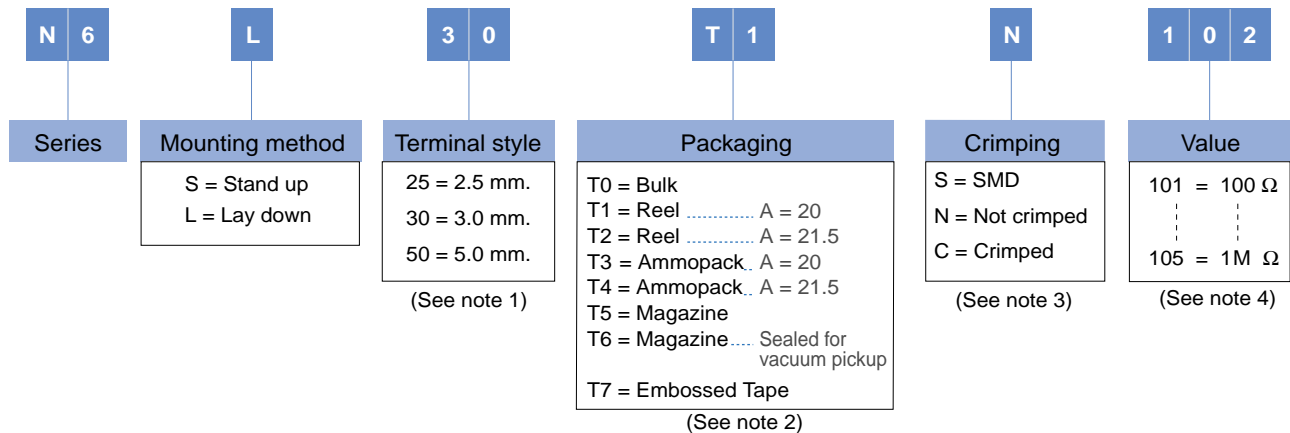
### ELECTRICAL SPECIFICATIONS

- Range of values \*  
 $100\Omega \leq R_n \leq 1M\Omega$  (1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)
- Tolerance:  $100\Omega \leq R_n \leq 1M\Omega$  .....  $\pm 30\%$
- Max. Voltage: 100 VDC
- Nominal Power 50°C (122°F) (see power rating curve): 0.1W
- Taper: linear
- End resistance:  $\leq 2\% R_n$  (10Ω min.)
- Equivalent noise resistance:  $\leq 5\%$
- Operating temperature\*\* :  
 $-25^\circ\text{C} + 70^\circ\text{C}$  ( $-13^\circ\text{F} + 158^\circ\text{F}$ )

\* Others upon request

\*\* Up to 85°C depending on application

### HOW TO ORDER



#### NOTES:

- (1) - Type "N-6 S" is only available with terminal style "25".  
- Terminal style "50" is only available with bulk packing "T0", "T5", "T6", "T7"
- (2) - Delivery for "T2" and "T4" only available in: N-6 S 25 and N-6 L 30  
- "T5", "T6" and "T7" only available in SMD.  
- "T7" Embossed Tape 1000 Units per Reel.
- (3) - Crimped terminals are only available in bulk packing "T0".  
- Crimped "S" is only available in N-6 L 50 T0, N-6 L 50 T5, N-6 L 50 T6, N-6 L 50 T7
- (4) Value: Example: Code: 10 2 = 1 K

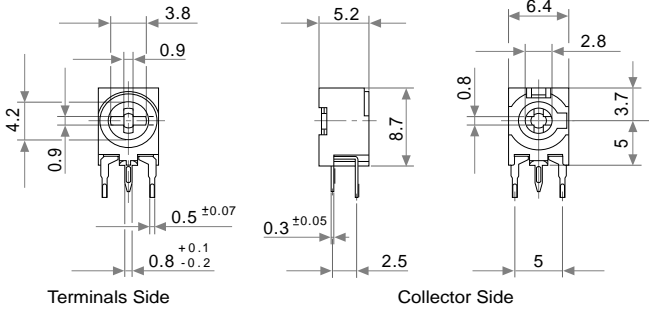
Number of zeros  
First two digits of the value.

NOTE: The information contained here in may be changed without prior notice.

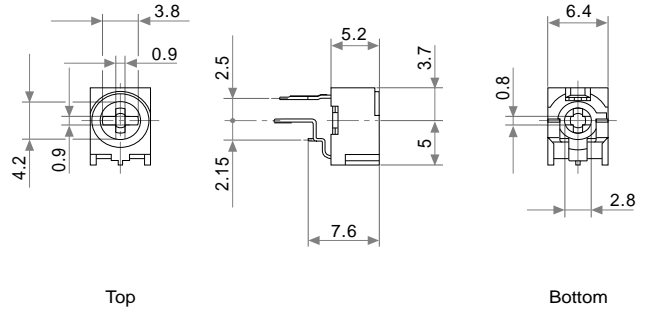
This project has been financially supported by the Spanish Technological Development Institute (CDTI).

# ROTOR

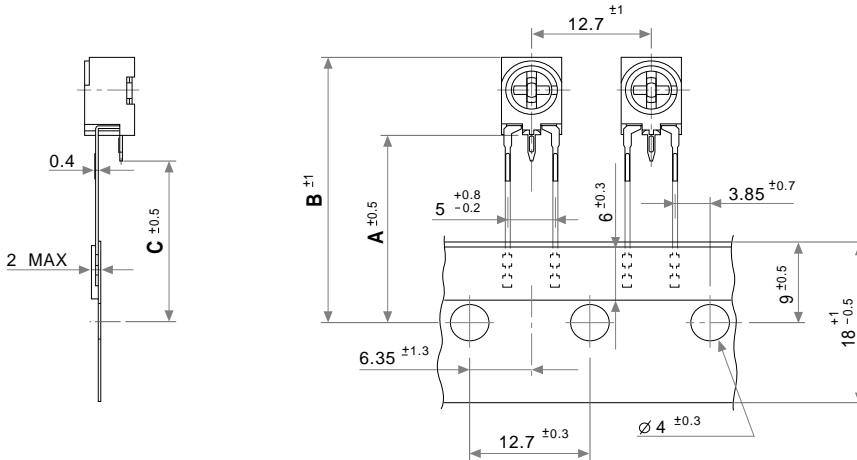
## Type S



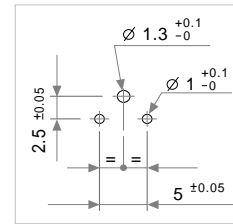
## Type L



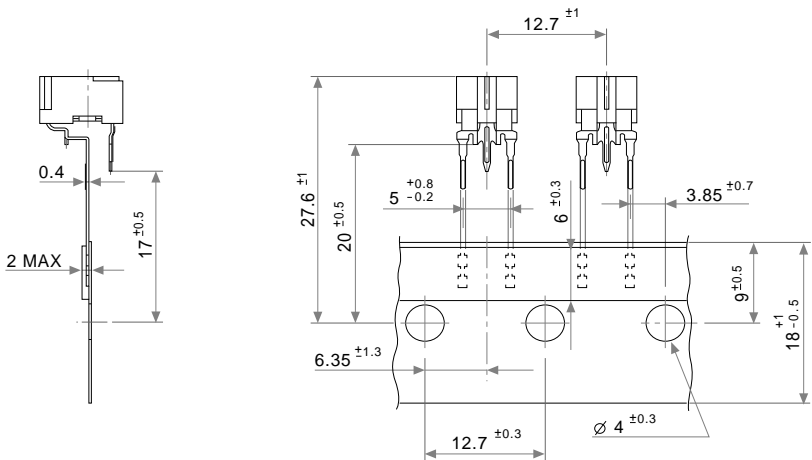
# TAPE



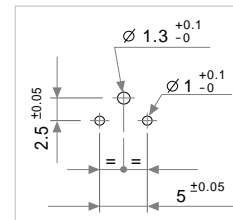
## PCB Hole Layout



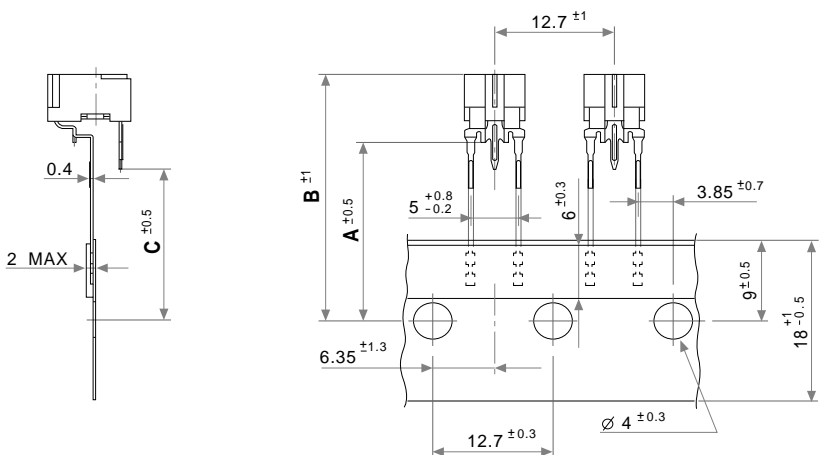
| MODEL            | A    | B    | C    |
|------------------|------|------|------|
| N-6 S 25 T1 / T3 | 20   | 28.7 | 17   |
| N-6 S 25 T2 / T4 | 21.5 | 30.2 | 18.5 |



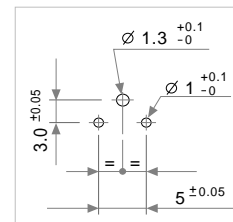
## PCB Hole Layout



N-6 L 25 T1 / T3

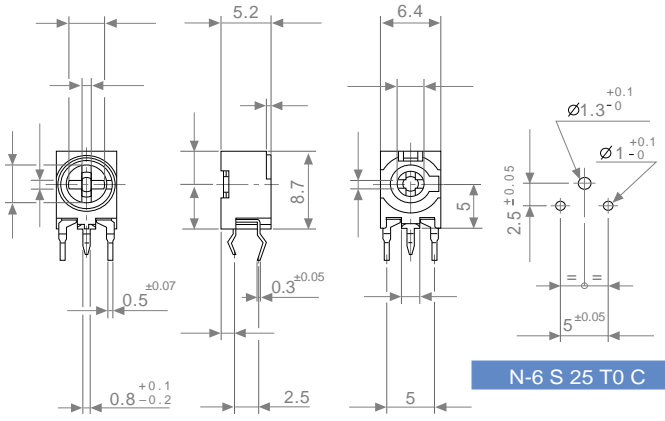


## PCB Hole Layout

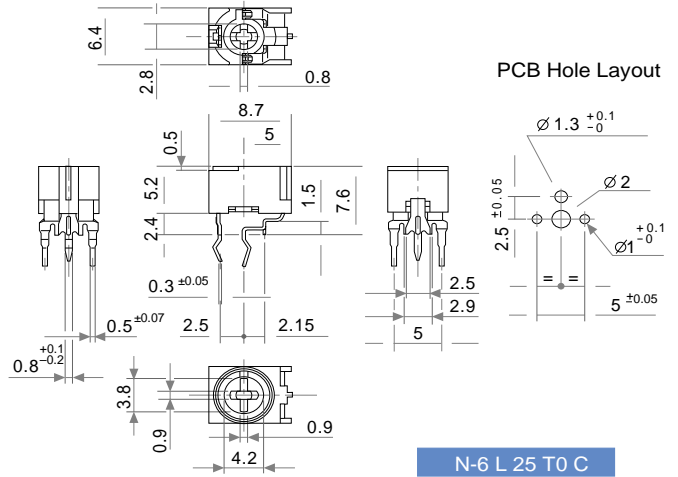


| MODEL            | A    | B    | C    |
|------------------|------|------|------|
| N-6 L 30 T1 / T3 | 20   | 27.6 | 17   |
| N-6 L 30 T2 / T4 | 21.5 | 29.1 | 18.5 |

**TYPE S**



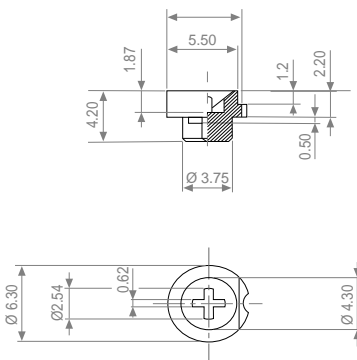
**TYPE L**



PCB Hole Layout

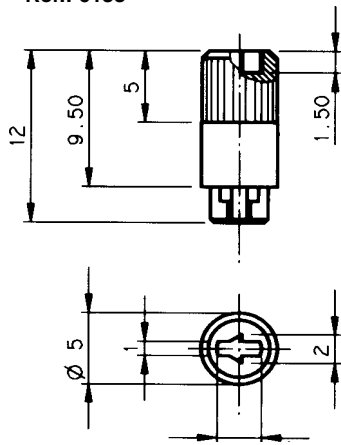
**KNOB**

Ref.: 5680



**SHAFT**

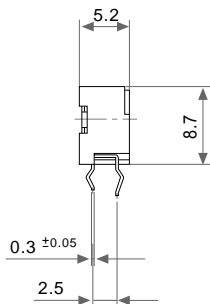
Ref.: 6133



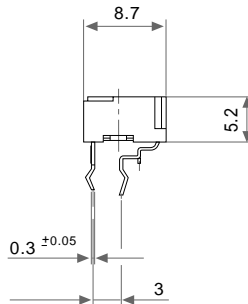
Order both Knob and Shaft separately

**CRIMPING DETAIL "C"**

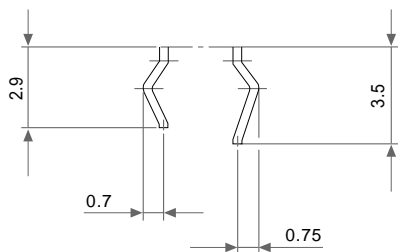
**Type S**



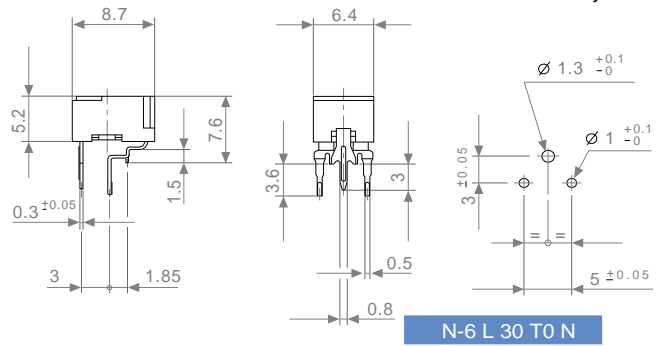
**Type L**



**CRIMPING DETAIL**

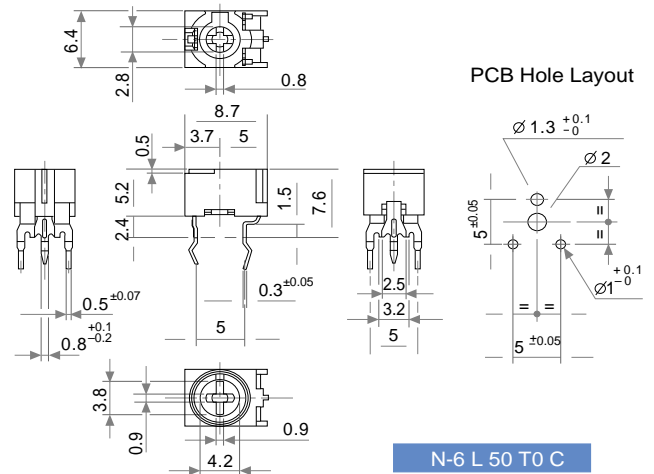


PCB Hole Layout



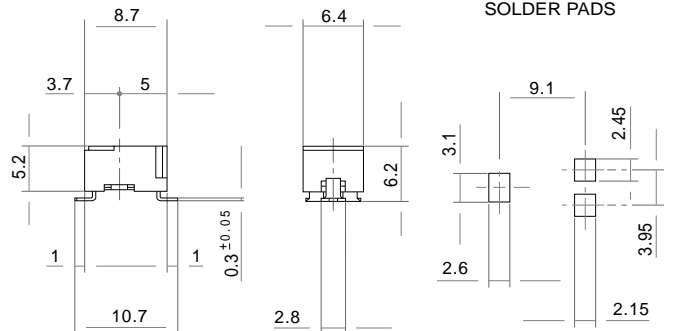
N-6 L 30 TO N

PCB Hole Layout

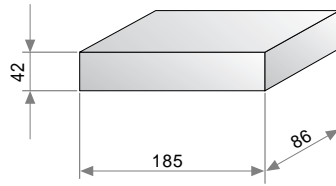


N-6 L 50 TO C

SOLDER PADS

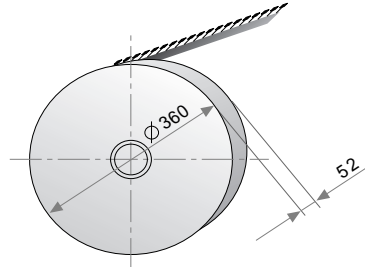


N-6 L 50 TO S



**T0 BULK**

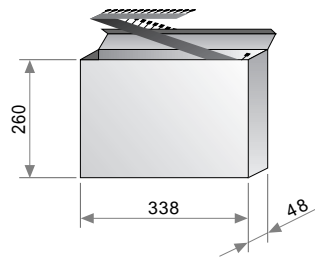
500 Units per box.



**T1 / T2 TAPE ON REEL**

Units per Reel according to type:

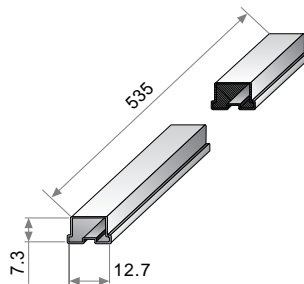
S: 1.000  
L: 750



**T3 / T4 AMMOPACK**

Units per Box according to type.

S: 1.000  
L: 750



**T5 / T6 MAGAZINE**

Units per magazine: 80

| AVAILABLE COMBINATIONS | TAPE |    |    |    | MAGAZINE |    | EMB. | BULK |       |
|------------------------|------|----|----|----|----------|----|------|------|-------|
|                        | T1   | T2 | T3 | T4 | T5       | T6 | T7   | SMD  | CRIMP |
| N-6 S 25               | ●    | ●  | ●  | ●  |          |    |      |      | ●     |
| N-6 L 25               | ●    |    | ●  |    |          |    |      |      | ●     |
| N-6 L 30               | ●    | ●  | ●  | ●  |          |    |      |      | ●     |
| N-6 L 50               |      |    | ●  |    | ●        | ●  | ●    | ●    | ●     |

| TESTS                    | TYPICAL VARIATIONS           | POWER RATING CURVE |
|--------------------------|------------------------------|--------------------|
| ELECTRICAL LIFE          | 1.000 h. @ 50°C: 0.1 W       |                    |
| MECHANICAL LIFE (CYCLES) | 100 @ 10 CPM ... 15 CPM      |                    |
| TEMPERATURE COEFFICIENT  | -25°C; +70°C                 |                    |
| THERMAL CYCLING          | 16 h. @ 85°C; 2h. @ -25°C    |                    |
| DAMP HEAT                | 500 h. @ 40°C @ 95% HR       |                    |
| VIBRATION                | 2 h. @ 20 g. @ 10 Hz. ... 50 |                    |

NOTE: Out of range values may not comply with these results.