

N-6 RoHS reflowable

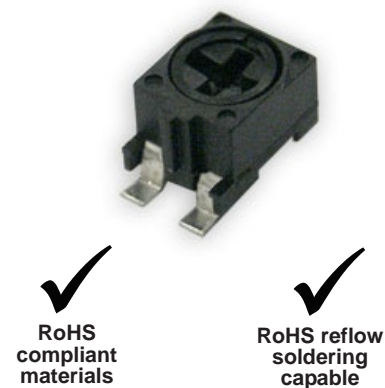
N-6 RoHS reflowable

v01

N-6R 6 mm SMD Carbon Potentiometer

FEATURES

- RoHS compliant materials ready
- Carbon resistive element
- Plastic substrate
- Over-moulding manufacturing technique
- SMD mounting
- RoHS reflow soldering capable (see how to order)
- Wiper positioned at 50%
- Both sides cross slot easy adjustment
- Accidental rotor movement protected
- Traceability insured through date code marking



MECHANICAL SPECIFICATIONS

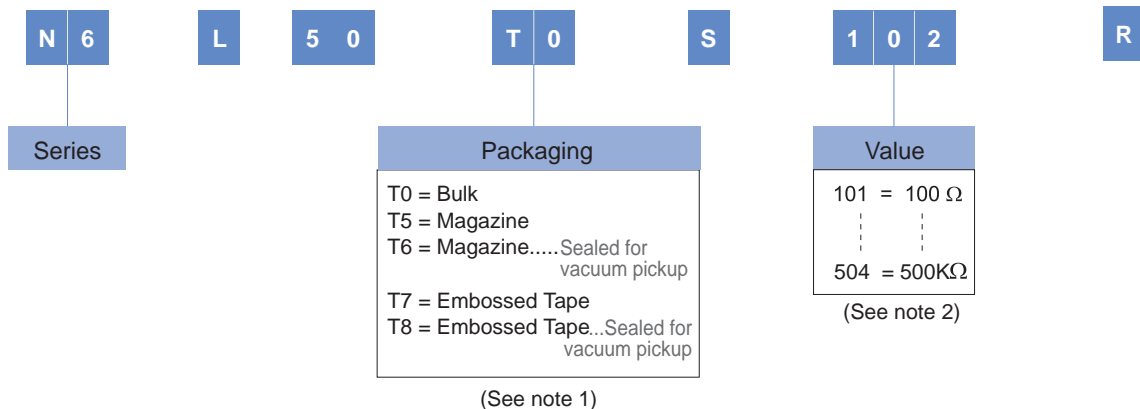
- Mechanical rotation angle: $280^\circ \pm 10^\circ$
- Electrical rotation angle: $245^\circ \pm 25^\circ$
- Torque: 0.2 to 3 Ncm. (0.28 to 4.2 in-oz)
- Stop torque: > 7.5 Ncm. (10.5 in-oz)

ELECTRICAL SPECIFICATIONS

- Range of values *
 $250 \Omega \leq R_n \leq 500K \Omega$ (1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)
- Tolerance: $1K \Omega \leq R_n \leq 500K \Omega$ $\pm 30\%$
- Max. Voltage: 100 VDC
- Nominal Power $50^\circ C$ ($122^\circ F$) (see power rating curve): 0.1W
- Taper: linear
- End resistance: $\leq 2\% R_n$ (10 Ω min.)
- Equivalent noise resistance: $\leq 5\%$
- Operating temperature** :
 $-25^\circ C + 70^\circ C$ ($-13^\circ F + 158^\circ F$)

* Others upon request ** Up to $85^\circ C$ depending on application

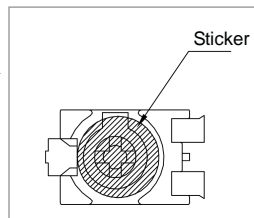
HOW TO ORDER



NOTES:

- (1) - "T7", "T8" Embossed Tape 750 Units per Reel. Diameter: 330 mm, aprox. thickness: 30 mm.
 - "T6" and "T8" are sealed for vacuum pickup (sticker at the bottom side)

- (2) Value: Example: Code: 10 2 = 1 K
 → Number of zeros
 → First two digits of the value.

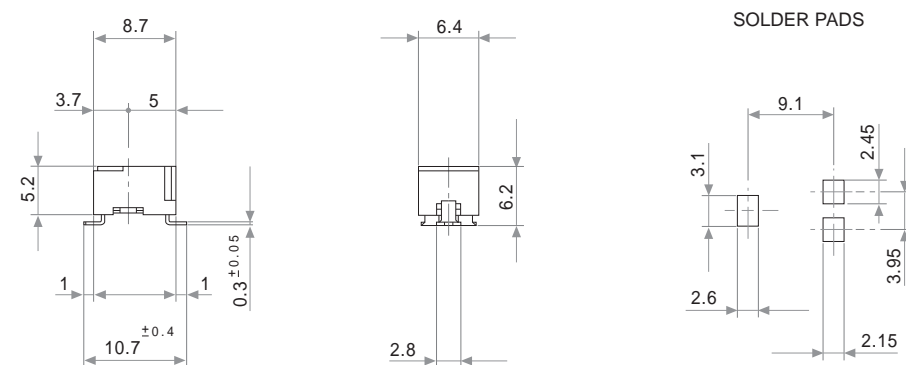


NOTE: The information contained here should be used for reference purposes only.
 This project has been financially supported by the Spanish Technological Development Institute (CDTI).



DIMENSIONS

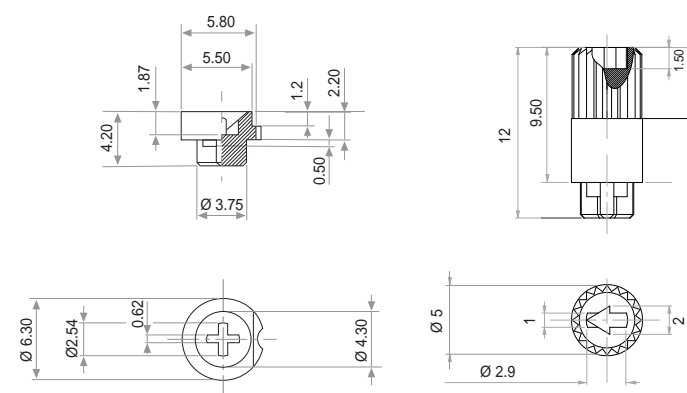
N-6 L 50 T0 S



KNOB Ref.: 5680

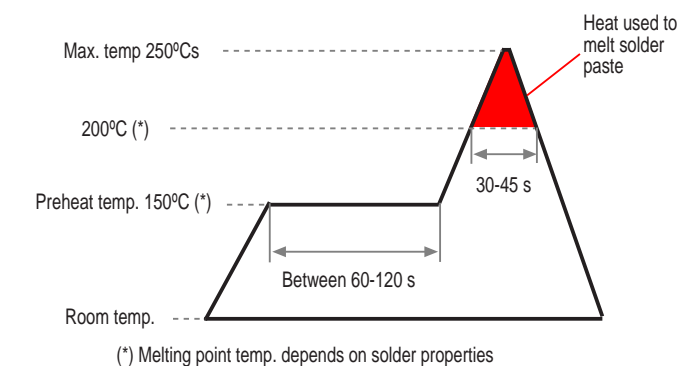
SHAFT Ref.: 6133

Please order both Knob and Shaft separately. They should be inserted after the reflow process. If you wish to use your own custom plastic shaft/knob/actuator please contact Piher for advice about compatible materials.

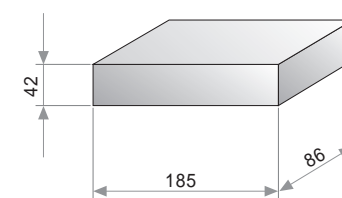


RoHS RECOMMENDED REFLOW PROFILE

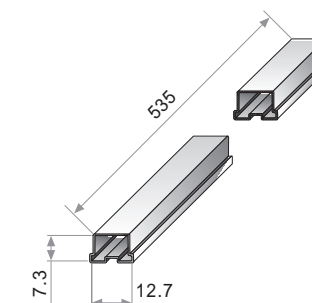
Recommended profile for N6R and N6RE models



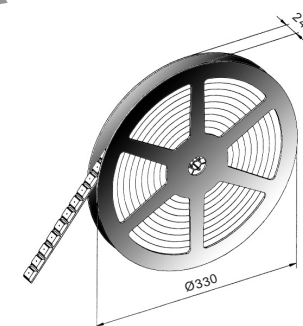
PACKAGING



T0 BULK
500 Units per box.



T5 / T6 MAGAZINE
Units per magazine: 80



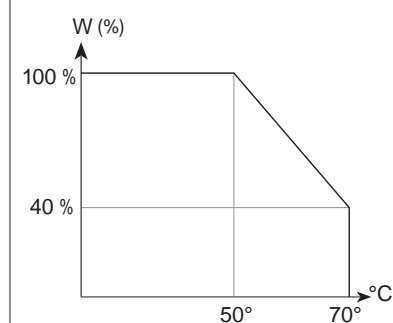
T7 / T8 EMBOSSED TAPE
Units per reel: 750

TESTS

ELECTRICAL LIFE	1.000 h. @ $50^\circ C$: 0.1 W	$\pm 10\%$
MECHANICAL LIFE (CYCLES)	100 @ 10 CPM ...15 CPM	$\pm 3\%$ ($R_n < 1 M \Omega$)
TEMPERATURE COEFFICIENT	$-25^\circ C$; $+70^\circ C$	± 300 ppm ($1K \leq R_n \leq 100K$)
THERMAL CYCLING	16 h. @ $85^\circ C$; 2h. @ $-25^\circ C$	$\pm 5\%$
DAMP HEAT	500 h. @ $40^\circ C$ @ 95% HR	$\pm 5\%$
VIBRATION (for each plane X,Y,Z)	2 h. @ 10 Hz. ... 55 Hz.	$\pm 2\%$

TYPICAL VARIATIONS

POWER RATING CURVE



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