

## N-6 RoHS reflowable

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v01

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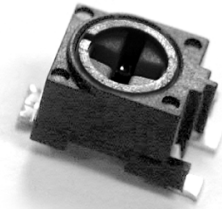
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## N-6 SMD 6 mm Carbon Potentiometer



RoHS compliant materials



RoHS reflow soldering capable

### 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)

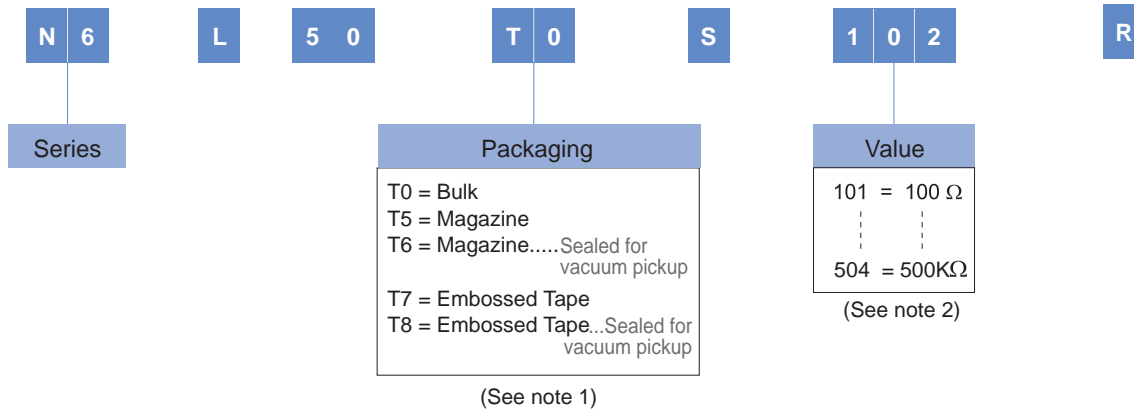
### ELECTRICAL SPECIFICATIONS

- 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 $\Omega$  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.

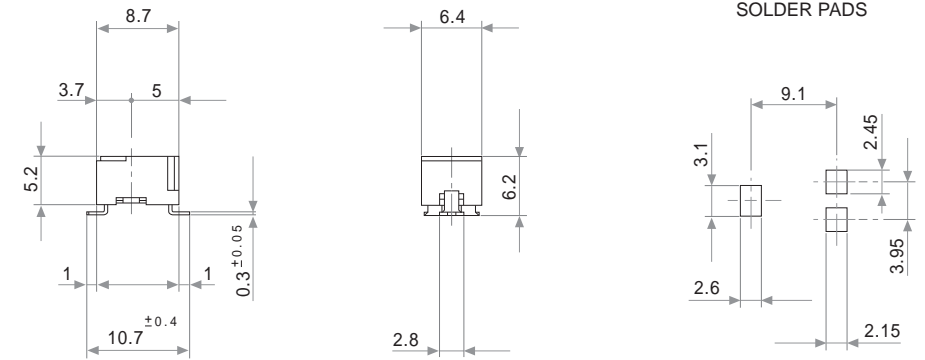
(2) Value: Example: Code: 10 2 = 1 K  
 Number of zeros  
 First two digits of the value.

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

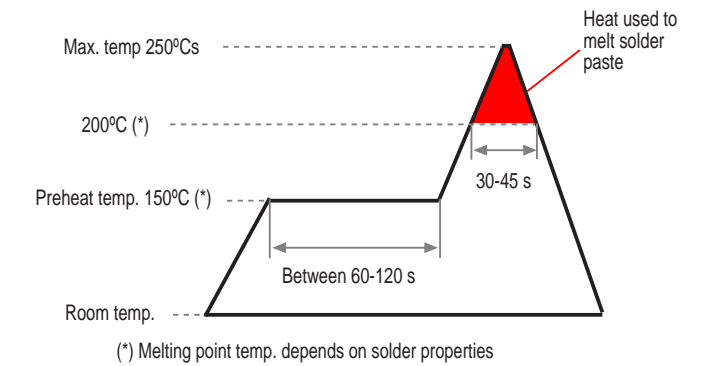
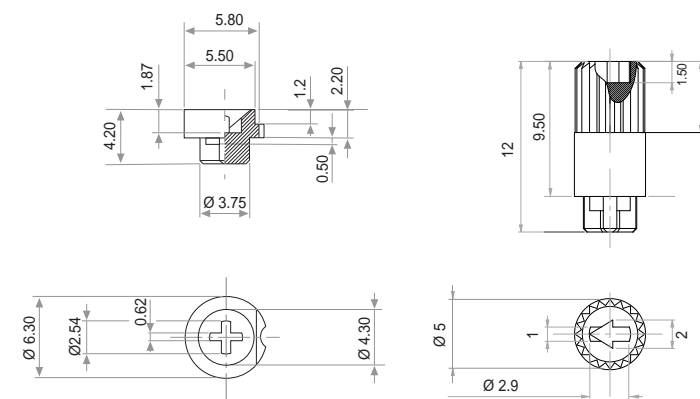


**KNOB** Ref.: 5680

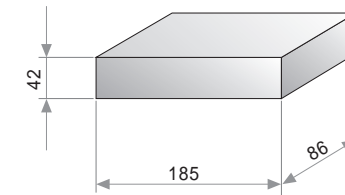
**SHAFT** Ref.: 6133

### RoHS RECOMMENDED REFLOW PROFILE

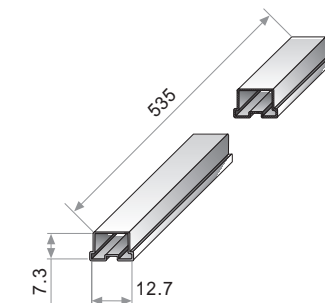
Please order both Knob and Shaft separately. They should be inserted after the reflow process



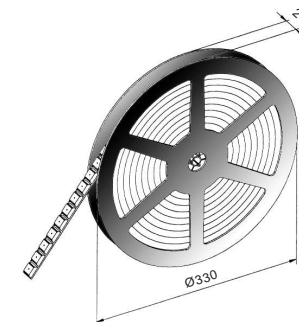
### PACKAGING



**T0 BULK**  
500 Units per box.



**T5 / T6 MAGAZINE**  
Units per magazine: 80

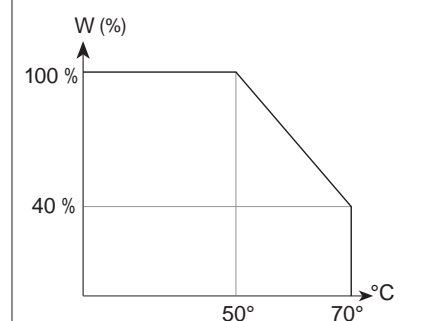


**T7 / T8 EMBOSSED TAPE**  
Units per reel: 750

### TESTS

TESTS	TYPICAL VARIATIONS	POWER RATING CURVE
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	$-25^\circ C$ ; $+70^\circ C$	$\pm 300$ 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.	$\pm 2\%$

### POWER RATING CURVE



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