# PIHER



# PS-10 10 mm SMD Potentiometer

#### **MAIN FEATURES**

- Specifically designed for leadfree reflow soldering processes (excellent performance)
- Carbon resistive element
- Dust proof enclosure
- Self extinguishable plastic UL 94V-0
- Also upon request:
  - · Wiper positioned at 50% or fully clockwise.
  - · Long life model for low cost control potentiometer applications
  - Mechanical detents
  - · Low torque versions

#### MECHANICAL SPECIFICATIONS

- Mechanical rotation angle:  $235^{\circ} \pm 5^{\circ}$ - Electrical rotation angle: 220° ± 20° 0.4 to 2 Ncm. (0.6 to 2.7 in-oz) - Torque: - Stop torque: > 5 Ncm. ( >7 in-oz)

- Life\*: Up to 10.000 cycles

\* Others upon request

#### **ELECTRICAL SPECIFICATIONS**

– Value (\*):  $1k\Omega$  to  $1M\Omega$ - Tolerance (\*): ± 30%

- Taper (\*): Linear

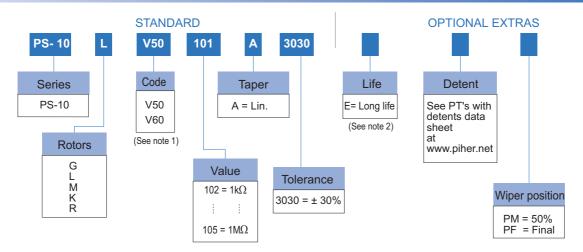
- Nominal Power: 0.15W @ 50°C (122°F) - Operating temperature: -40°C + 85°C

- Residual resistance: ≤ 5.10<sup>-3</sup> Rn

- Equivalent Noise Resistance: ≤ 3% Rn

\* Others upon request

#### **HOW TO ORDER**



-1-

NOTES:

V50: without locating pins V60: with locating pins

Up to 10.000 cycles. Others upon request. (2)

NOTE: The information contained here should be used for reference purposes only.













# HOW TO ORDER CUSTOM DRAWING

PS-10MV50 + DRAWING NUMBER (Max. 16 characters)

# STANDARD OPTIONS

Detents	None
Rotor colour	Dark grey
Housing colour	Dark grey
Wiper position	Initial
Torque	Standard
Life	500 cycles
Packaging	Reel

#### **ROTORS**



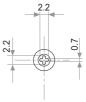




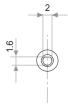
**M** = Hexagonal thru hole



**G** = Hexagonal thru hole



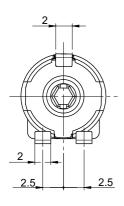
**K** = Cross slot thru hole

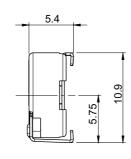


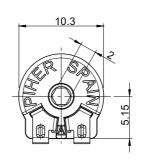
R = thru hole

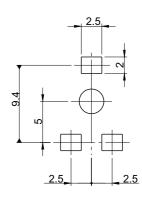
Note: wipers positioned at 50%

# **DIMENSIONS - V50**

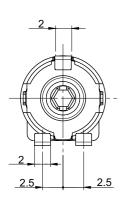


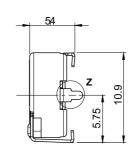


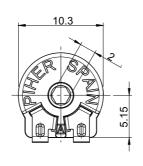


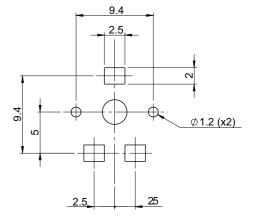


# **DIMENSIONS - V60**

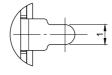


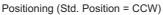


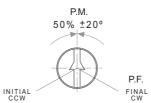




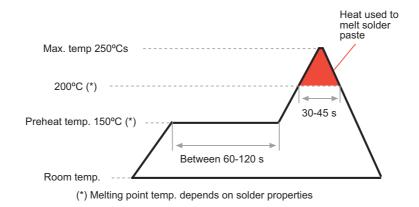
Centering Pin Z





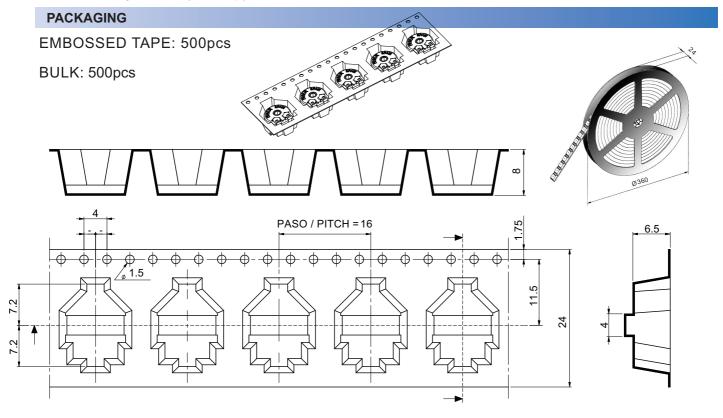


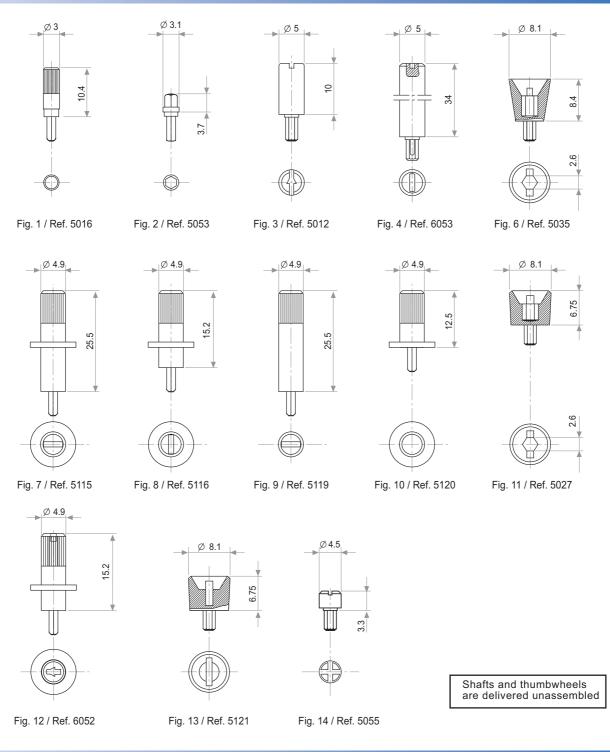
# RECOMMENDED REFLOW PROFILE



TESTS		TYPICAL VARIATIONS
ELECTRICAL LIFE	1.000 h. @ 50°C; 0.15 W	±10%
MECHANICAL LIFE (CYCLES)	500 @ 10 CPM15 CPM	±10 %
TEMPERATURE COEFFICIENT	–40°C; +85°C	±1000 ppm
THERMAL CYCLING	16 h. @ 90°C; 2h. @ -40°C	±5 %
DAMP HEAT	500 h. @ 40°C @ 95% HR	±10 %
VIBRATION (for each plane X,Y,Z)	2 h. @ 10 Hz 55 Hz.	±2 %

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





# **THUMBWHEELS**

