

## Type 23 Series

## **Key Features**

- Versatile design can be customised to suit your requirements
- 0.4 Watt at 40°C
- Die Cast Metal Bush Available
- Insulated Bush Available
- Insulated Shafts up to 50mm
- Eyelet or PC Terminations
- Rugged Construction
- Mounting Bracket
- Audio Laws Available
- Dual Gang and Dual Concentric Styles



A popular range of 20mm control potentiometers, the type 23 series can be tailored to suit more specific requirements. The potentiometers are available with printed carbon resistance element, choice of bush lengths in metal or plastic and insulated shafts up to 50mm in length. In addition, approved mains and low current switches are available as standard options.

## **Characteristics - Electrical**

Resistance Range (Law):	1K to 1M (Linear)
	4K7 to 470K (Non Linear)
Resistance Values:	1, 2.2 and 4.7 per decade
Resistance Tolerance:	± 20% (± 10% by selection)
Rated Dissipation at 40°C:	0.4W (Linear), 0.2W (Non Linear)
Limiting Element Voltage:	500V DC or AC RMS
Electrical Rotation:	267° without switch, 232° with switch
Terminal Resistance:	5 Ohms maximum
Noise (ENR):	2% maximum (Linear), 3% maximum (Non Linear)
Insulation Resistance:	4G minimum
Voltage Proof:	1000 V AC peak

### **Characteristics - Mechanical**

Operating Torque:	15 mNm maximum
Mechanical Rotation:	300°
End Stop Torque:	800 mNm maximum

### **Characteristics - Environmental**

Limits of Resistance Change:	15% (After 1000 hours endurance)
Operating Temperature Range:	-25°C to +70°C
Temperature Characteristics of Resistance:	5% ( -55°C to 125°C )
Bump Severity:	390m/s², 4000 Bumps
Vibration Severity:	10 - 500 Hz, 0.75mm or 98m/s <sup>2</sup>
Climatic Category:	8 days @ 36°C 82% RH R < 15%
Mechanical Endurance:	15000 Operations (minimum)



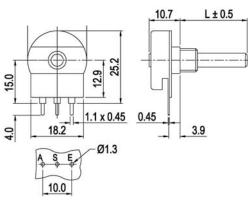
## **Type 23 Series**

## DIY Design

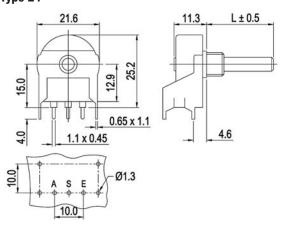
The 23 Series can be customised to suit your individual requirements with features such as detent action, track centre tap etc.

Please call our technical sales team to discuss variations on these 20mm diameter devices.

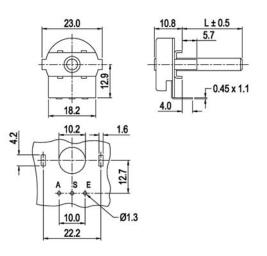
Dimensions Type 23



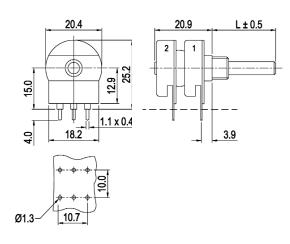
Type 24



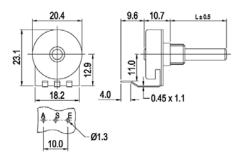
Type 25



Type 27



Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Type 26 (Non Switched only)



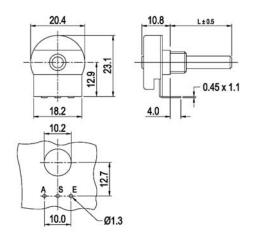
**Type 28** 

Dimensions are shown for

reference purposes only.

Specifications subject

to change.



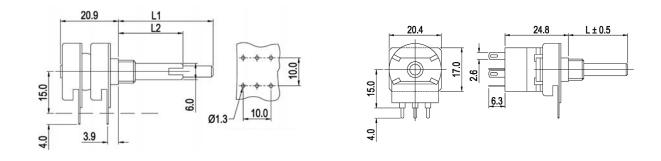
For email, phone or live chat, go to: te.com/help



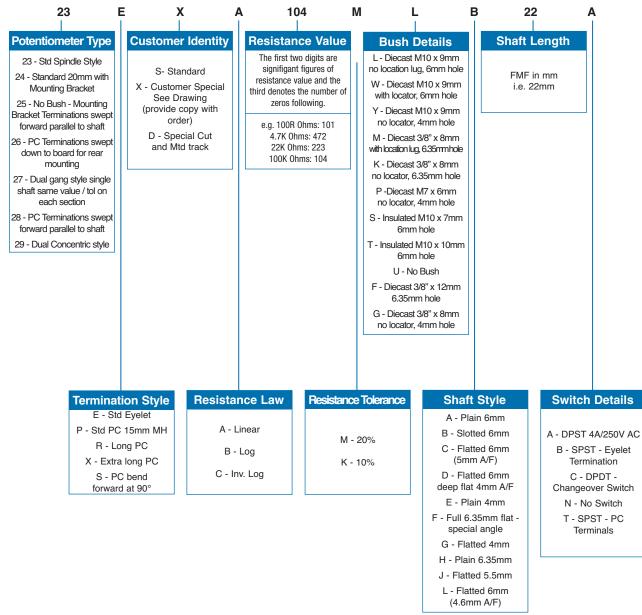
## Type 23 Series



**Switched Types** 



### How to Order



TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.

Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this datasheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice.

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

**TE Connectivity:** 

23ESB105MMF50NF 23ESA105MMF50AF 23ESA222MLA50N 23ESB473MMF50A