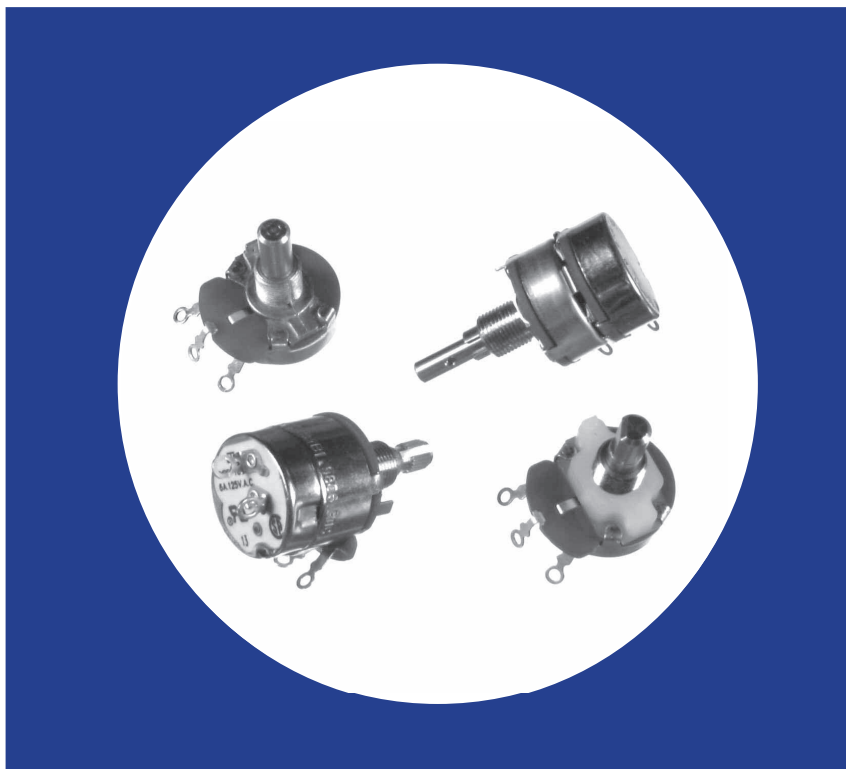


## Industrial 15/16" (24mm) Diameter, 5-Watt, Wirewound Variable Resistors

### Features

- Dust-proof construction
- Water splash proof construction available
- 5-watt power rating
- Superior resistance stability in temperature and environment change
- Tandem constructions available
- Bushing or twist tab mounting
- Available with pull-push and rotary power switches
- Excellent linearity performance
- RoHS compliant



## Electrical and Mechanical Specifications

### Resistance Range

Linear : 1 ohm through 25K ohms  
Audio : 20 ohms through 10K ohms

### Resistance Tolerance

Standard :  $\pm 10\%$   
Special : Tighter tolerance available in most resistance values

### Power Rating

5 watts @25°C, 4 watts @ 55°C, derated to no load at 105°C, linear taper  
(Derating required on two section counts.)

### Voltage Rating

Bushing to Terminals:  
High pot test, one minute -- 1,000 VAC  
Operating maximum -- 500 VDC

Across End Terminals:  
350 VDC maximum, load not to exceed wattage rating.

### Resistance Tapers

Standard: Linear or 20% audio  
Special: Consult CTS

### Linearity

Standard: 3% linearity  
Special: Consult CTS

### Power Switches

Rotary Pole-SPST, DPST & SPDT  
Pull-Push Pole-SPST (Pull-ON, Push-OFF)

### Rotational Angle

**Mechanical Rotation:**  
Without switch:  $300^{\circ} \pm 5^{\circ}$   
With switch:  $300^{\circ} \pm 5^{\circ}$

**Effective Rotation:**  
Without switch:  $280^{\circ} \pm 5^{\circ}$   
With switch:  $265^{\circ} \pm 5^{\circ}$

### Rotational Torque:

Standard: 3/4 to 6 in. oz (54 - 432 gf-cm)  
Special: higher torque models available, consult CTS

### Operating Temperature

-30°C to +85°C

(continued on next page)

### Shaft Information

Available for round, flatted, knurled, or slot metal shaft  
 Diameter: 6.35mm (.250")  
 Consult CTS for custom-made metal and economic plastic shaft

### Shaft Center to Lug

Standard: .438" (11.1mm)  
 Special: .531" (13.5mm) available

### Mounting Information

#### Bushing Mount

Diameter: EIA standard 3/8-32 UNEF-2A thread  
 Standard length: 9.53mm (.375") or 6.35mm (.250")  
 Consult CTS for custom-made metal and economic plastic bushing

#### Twisted Tab Mounting Available

#### Locating Lugs

Standard: Left lug with terminals facing inward  
 Available: No lug, right lug or two lugs with terminals facing inward

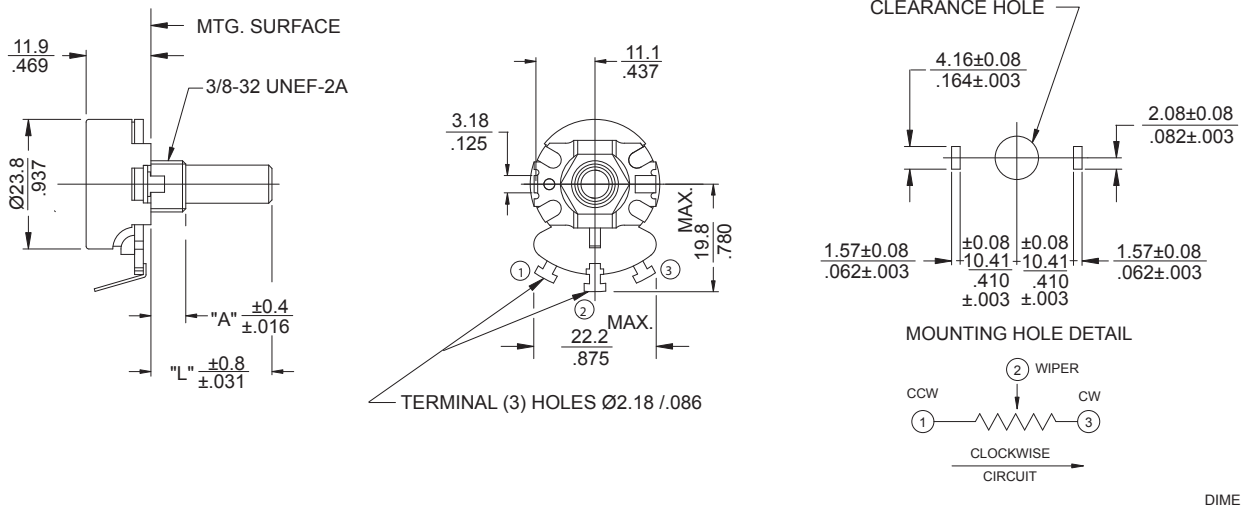
### Special Features and Constructions

Terminals accepting push-on connectors available.  
 Straight or concentric tandem constructions.  
 Can be combined with 450 series, 15/16" (24mm) diameter, to make any combination of straight or concentric tandem constructions with or without switch.  
 Long life constructions available.

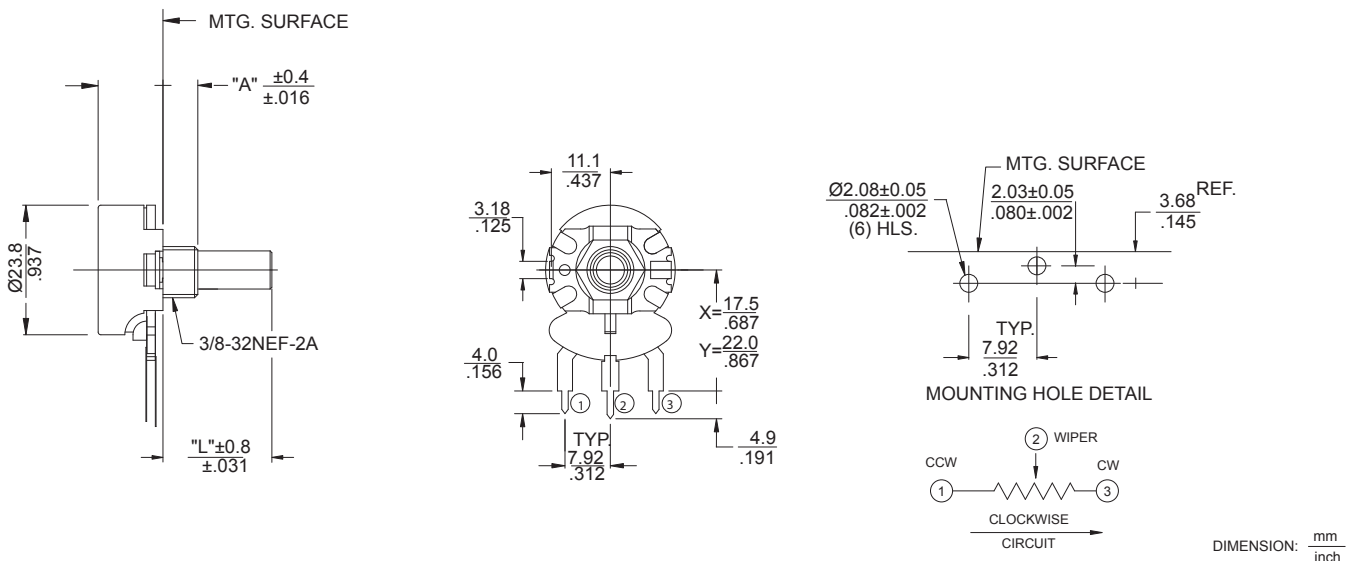
### Long Life Construction

This construction provides an extended life of 50K and 100K cycles. Consult CTS for details.

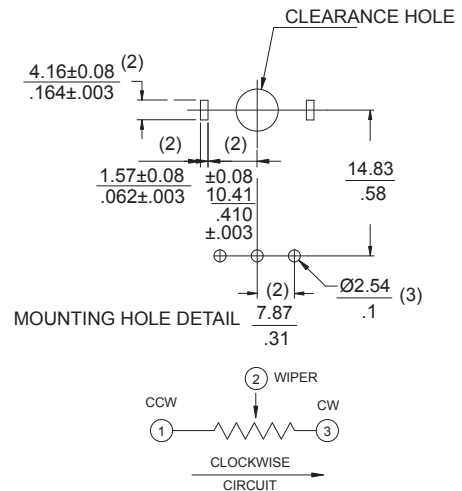
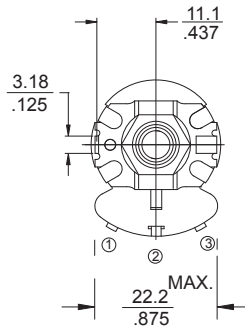
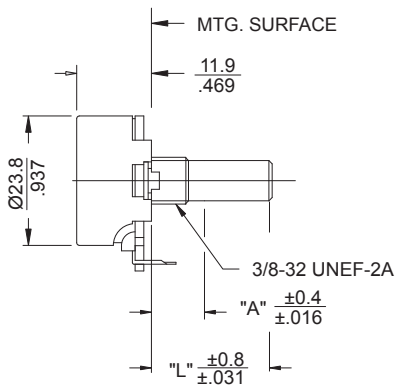
## T026 Metal Shaft, Bushing Mounting, Type "T" Solder Lug Terminals



## X026 / Y026 Metal Shaft, Bushing Mounting, Printed Circuit Type X/Y Terminals

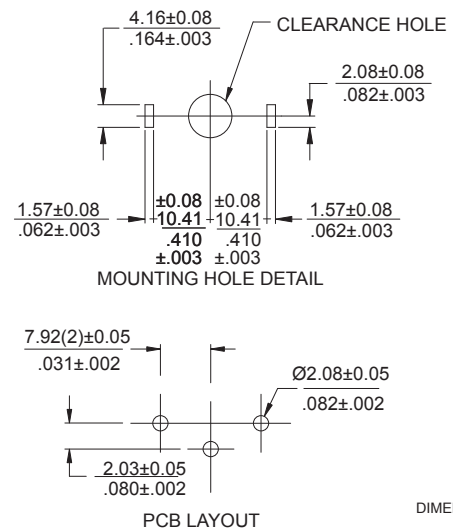
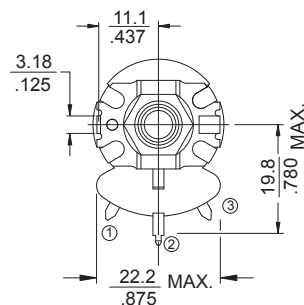
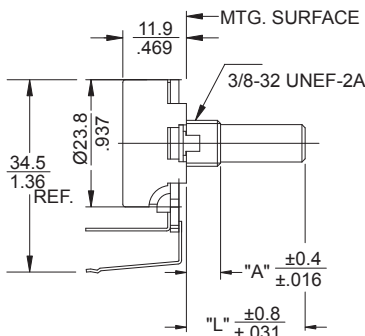


## U026 Metal Shaft, Bushing Mounting, Printed Circuit Type "U" Formed Terminals



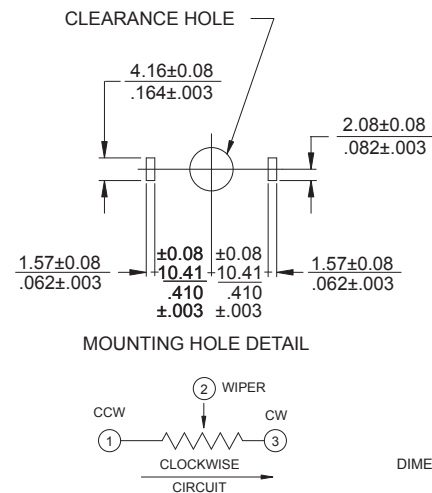
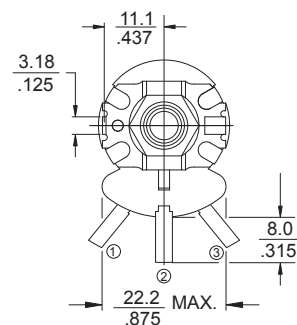
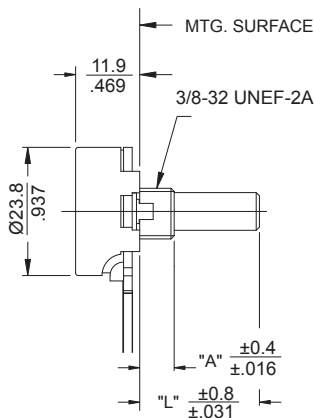
DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

## V026 Metal Shaft, Bushing Mounting, Printed Circuit Type "V" Formed Terminals



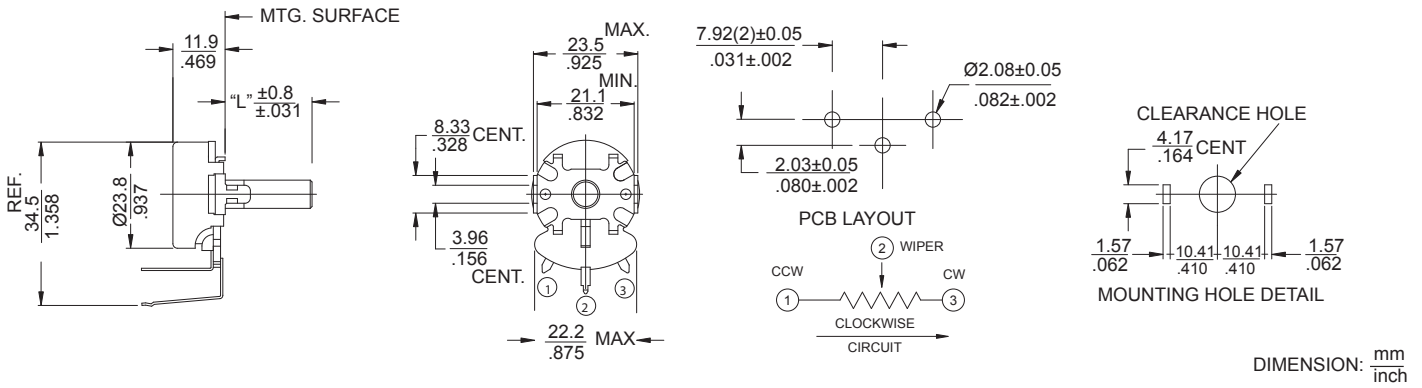
DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

## S026 Metal Shaft, Bushing Mounting, Faston Type "S" Formed Terminals



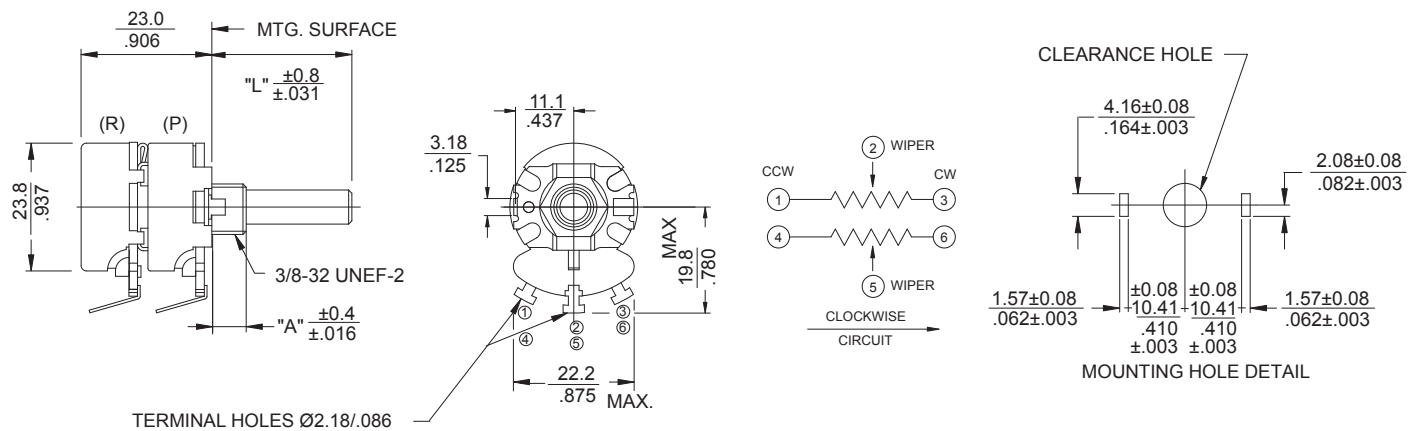
DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

## VPE026 Metal Shaft, Twist TAB Mounting, Type "V" Formed Terminals



\* Consult CTS for details

## T2-026 Dual-section, Metal Shaft, Bushing Mounting, Type "T" Solder Lug Terminals



\* More multi-section models available, consult CTS for details

## Ordering Information

<b>026</b>	<b>T</b>	<b>2</b>	<b>20</b>	<b>R</b>	<b>103</b>	<b>B</b>	<b>1</b>	<b>A</b>	<b>1</b>																				
<b>TERMINAL STYLE</b> T - SOLDER LUG X - PC .687"(17.5mm) Y - PC .867"(22.0mm) U - FORMED TO FRONT V - FORMED TO REAR S - FASTON	<b>METAL MOUNTING STYLE "A"</b> <b>BUSHING LENGTH: 1/8" INCREMENTS</b> <b>EXAMPLES:</b> 2 - .250"(6.35mm) 3 - .375"(9.53mm) 8 - 1.000"(25.4mm) 1 - TWIST TAB MOUNT A - .250"(6.35mm) DIECAST B - .375"(9.53mm) DIECAST	<b>SHAFT TRIM</b> R - ROUND F - FLATTED .375"X.156" (9.53mmX4.0mm) K - KNURLED EIA S148 24 TEETH S - SD SLOT .063" DEEP X.047" WIDE (1.6mmX1.2mm)	<b>RESISTANCE CODE EXAMPLES</b> <table border="1"> <tr><th>CODE</th><th>RESISTANCE</th></tr> <tr><td>5A0</td><td>5 OHMS</td></tr> <tr><td>501</td><td>500 OHMS</td></tr> <tr><td>102</td><td>1K</td></tr> <tr><td>252</td><td>2.5K</td></tr> <tr><td>502</td><td>5K</td></tr> <tr><td>103</td><td>10K</td></tr> <tr><td>253</td><td>25K</td></tr> </table>	CODE	RESISTANCE	5A0	5 OHMS	501	500 OHMS	102	1K	252	2.5K	502	5K	103	10K	253	25K	<b>RESIST TOL</b> A - ±10% B - ±20% D - ±5%	<b>TAPER</b> 1 - LINEAR 2 - 20%AUD 3 - 20%CCW AUD	<b>SPECIALS</b> 1 - LOCATING LUG LEFT SIDE 2 - LOCATING LUG RIGHT SIDE 3 - NO LOCATING LUG 5 - LOCATING LUG BOTH SIDE							
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<b>METAL SHAFT LENGTH "L"</b> <b>FROM MOUNTING SURFACE 1/32" INCREMENTS</b> <b>EXAMPLES:</b> 20 - .625"(6.35mm) 24 - .750"(19.5mm) 28 - .875"(22.2mm) 32 - 1.000"(25.4mm) * CONSULT CTS FOR SPECIAL REQUIREMENTS	<table border="1"> <thead> <tr> <th>SWITCHES</th> <th>FUNCTION</th> <th>CTS TYPE</th> <th>CURRENT RATING</th> </tr> </thead> <tbody> <tr><td>A - NONE</td><td></td><td></td><td></td></tr> <tr><td>B - SPST</td><td>ROTARY</td><td>TGC</td><td>6AMP@125VAC</td></tr> <tr><td>C - DPST</td><td>ROTARY</td><td>027</td><td>3AMP@125VAC 1AMP@250VAC</td></tr> <tr><td>D - SPDT</td><td>ROTARY</td><td>028</td><td>3AMP@125VAC</td></tr> <tr><td>E - SPST</td><td>PULL-PUSH</td><td>FR-K</td><td>3AMP@125VAC</td></tr> <tr><td>F - SPST</td><td>ROTARY</td><td>FR-GC</td><td>3AMP@125VAC 1AMP@250VAC/DC</td></tr> </tbody> </table>	SWITCHES	FUNCTION	CTS TYPE	CURRENT RATING	A - NONE				B - SPST	ROTARY	TGC	6AMP@125VAC	C - DPST	ROTARY	027	3AMP@125VAC 1AMP@250VAC	D - SPDT	ROTARY	028	3AMP@125VAC	E - SPST	PULL-PUSH	FR-K	3AMP@125VAC	F - SPST	ROTARY	FR-GC	3AMP@125VAC 1AMP@250VAC/DC
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\* CONSULT CTS FOR DETAILS