



## Electrical Specifications

| Parameter               | Conditions & Remarks | Min  | Max  | Unit    |
|-------------------------|----------------------|------|------|---------|
| Resistance Range        | Linear               | 1K   | 500K | Ohms    |
| Resistance Tolerance    | ±20%, ±10%           |      |      |         |
| Dielectric Strength     | 1 minute             |      | 750  | VDC     |
| Power Rating (Standard) | 55°C                 |      | 0.25 | Watts   |
| Power Rating (Special)  | 75°C                 |      | 0.50 | Watts   |
| Operating Voltage       |                      |      | 500  | VDC     |
| Insulation Resistance   | 500 VDC              | 1000 |      | Megohms |
| Linearity               |                      |      | ±2   | %       |

## Mechanical and Environmental

|                             |  |
|-----------------------------|--|
| Rotational Torque           | 20 to 180 gf-cm                              |
| Rotational Life             | 2 Million cycles                             |
| Mechanical Angle            | 250°, 300°, 360°                             |
| Stop Strength               | 9 kgf-cm                                     |
| Push-Pull Strength of Shaft | 13.6 kg for 10 seconds                       |
| Mounting Information        | Bushing mount                                |
| Ingress Protection Rating   | IP54, IP67                                   |
| Manual Soldering            | Maximum temperature of 350°C for 3 seconds   |
| Vibration                   | 15G, 10 to 2000 Hz                           |
| RoHS                        | Lead-Free. Fully compliant to RoHS Directive |
| Packaging :                 | Standard tray packaging                      |
| Operating Temperature:      | -40°C to +125°C                              |
| Storage Temperature:        | -55°C to +150°C                              |

### Mechanical Specifications

Figure 1 – 282S – Metal Shaft, Bushing Mount, Solder Lug Terminal Formed to Rear

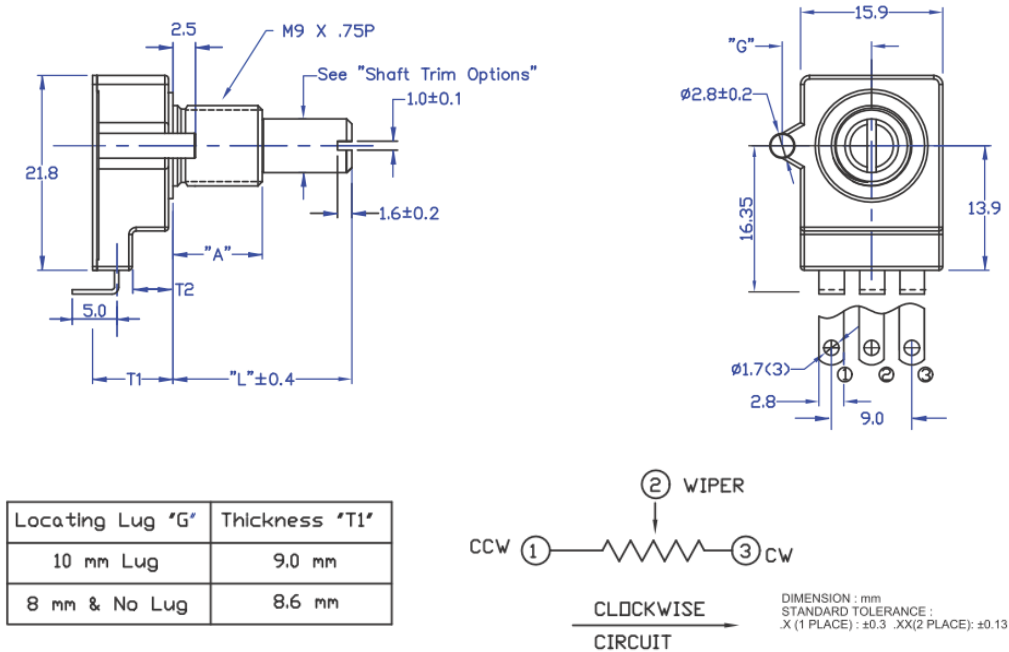
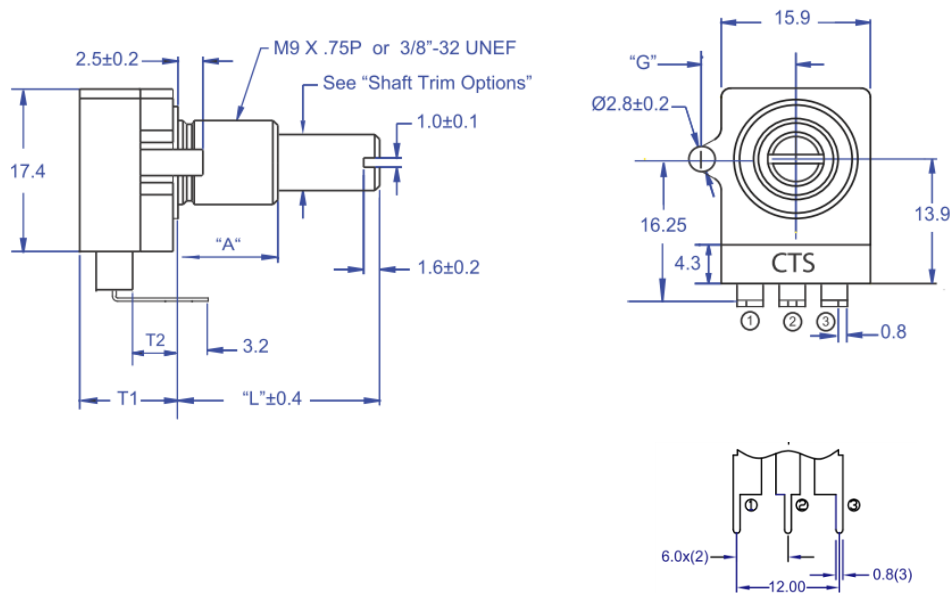


Figure 2 – 282U – Metal Shaft, Bushing Mount, PC Terminal Formed to Front



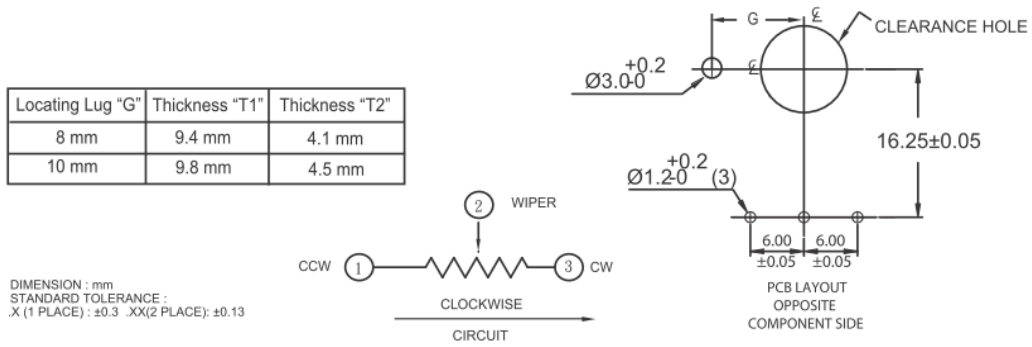
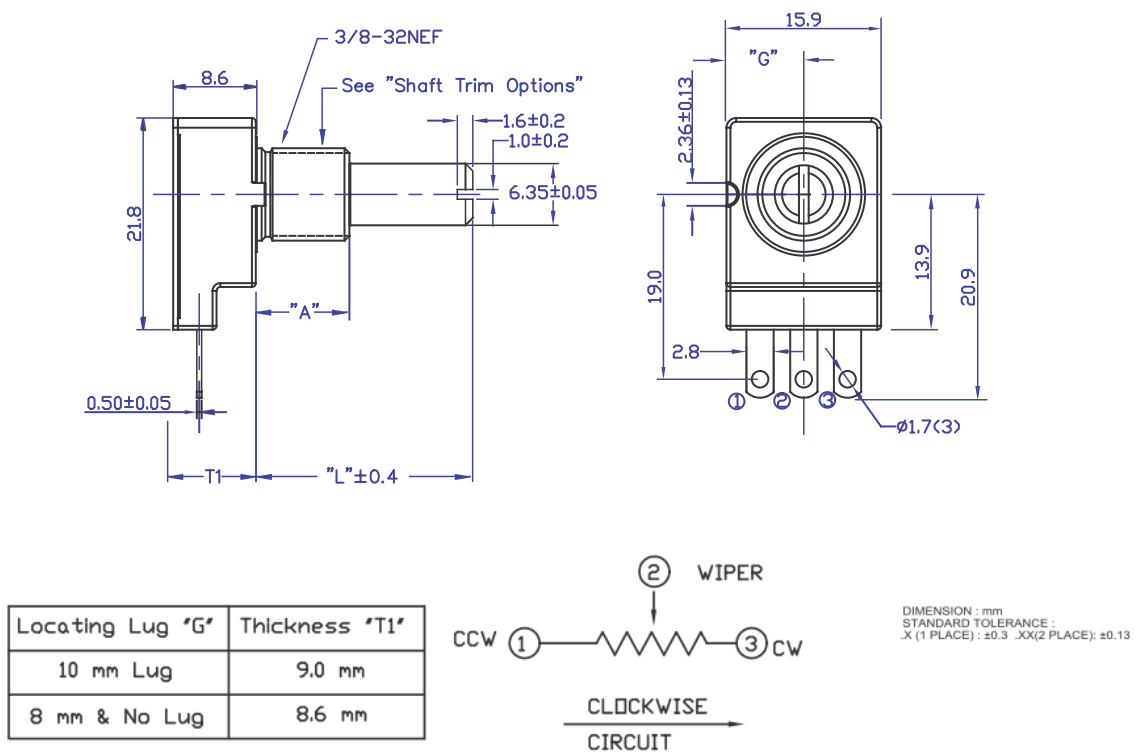


Figure 3 – 282T– Metal Shaft, Bushing Mount, Solder Lug Terminals, with 8 mm Locating Lug



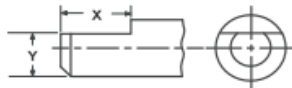
### Shaft Trim Options

ROUND



| Shaft Trim | Diameter        |
|------------|-----------------|
| R          | .236" (6.00 mm) |
| O          | .250" (6.35 mm) |

FLATTED



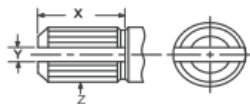
| Shaft Trim | Diameter        | X                | Y               |
|------------|-----------------|------------------|-----------------|
| F          | .236" (6.00 mm) | .375" (9.52 mm)  | .156" (3.96 mm) |
| L          | .250" (6.35 mm) | .440" (11.18 mm) | .217" (5.50 mm) |

SD SLOT



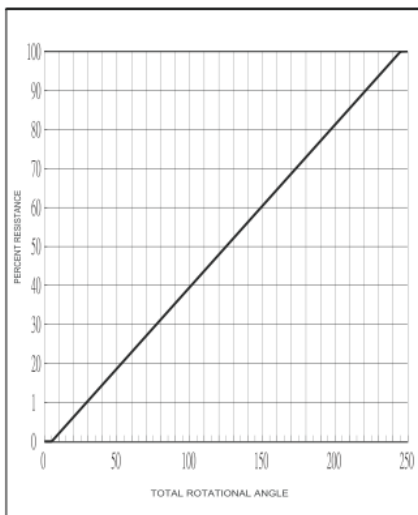
| Shaft Trim | Diameter        | X             | Y             |
|------------|-----------------|---------------|---------------|
| S          | .236" (6.00 mm) | .063" (1.6mm) | .039" (1.0mm) |
| D          | .250" (6.35 mm) | .063" (1.6mm) | .039" (1.0mm) |

KNURLED & SLOTTED

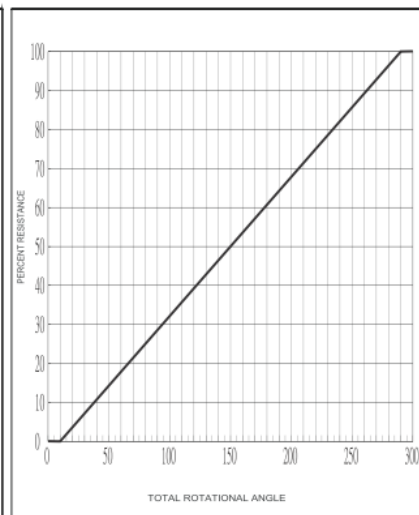


| Shaft Trim | Diameter        | X               | Y               | Z        |
|------------|-----------------|-----------------|-----------------|----------|
| K          | .236" (6.00 mm) | .344" (8.74 mm) | .063" (1.60 mm) | 24 Teeth |

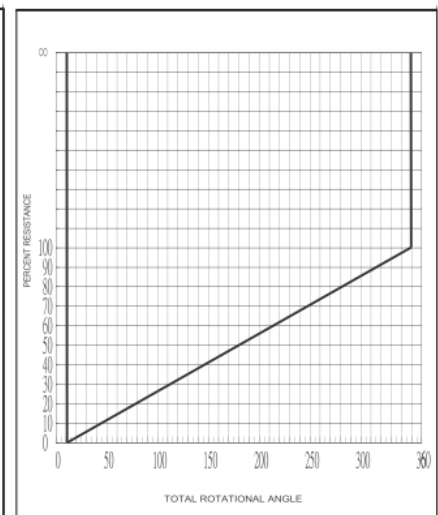
### Resistance Tapers



TOTAL ROTATIONAL ANGLE: 250



TOTAL ROTATIONAL ANGLE: 300°



TOTAL ROTATIONAL ANGLE: 360°

