

Bulk Metal[®] Foil Technology

Precision Trimming Potentiometers

3/4 Inch Rectilinear, $\pm 5\text{ppm}/^{\circ}\text{C}$ and $\pm 15\text{ppm}/^{\circ}\text{C}$ TCR



Product may not
be to scale

FEATURES

- Temperature Coefficient of Resistance (TCR): $\pm 15\text{ppm}/^{\circ}\text{C}$ (Model 1280G); $\pm 5\text{ppm}/^{\circ}\text{C}$ (Model 1285G)⁴ (-55°C to +125°C Ref @ +25°C); Through the wiper $\pm 50\text{ppm}/^{\circ}\text{C}$
- Load Life Stability: 0.5% Maximum ΔR under Full Rated Power @ +25°C for 2,000 hours
- Settability: 0.05% Typical; 0.1% Maximum
- Setting Stability: 0.1% Typical; 0.5% Maximum, ΔSS
- Power Rating: 0.75 watts @ +25°C
- Resistance Range: 10Ω to 20KΩ
- Resistance Tolerance: $\pm 10\%$, $\pm 5\%$
- Backlash: < 0.05%
- Tap Test: 0.05% Typical; 0.1% Maximum

TABLE 1 - 1280G AND 1285G SERIES ELECTRICAL SPECIFICATIONS

Resistance Tolerance	Model 1280G 10% ¹ Model 1285G 5%
Resistance Range	10Ω to 20KΩ
T.C.R. Model 1280G	$\pm 15\text{ppm}/^{\circ}\text{C}$ (-55°C to +25°C) $\pm 15\text{ppm}/^{\circ}\text{C}$ (+25°C to +125°C)
T.C.R. Model 1285G ⁴	$\pm 5\text{ppm}/^{\circ}\text{C}$ (-55°C to +25°C) $\pm 5\text{ppm}/^{\circ}\text{C}$ (+25°C to +125°C)
Power	0.75W @ +25°C derated linearly to zero watts @ +125°C (See Fig. 2)
Settability	0.05% Typical ² ; 0.1% Maximum
Setting Stability	0.1% Typical; 0.5% Maximum, ΔSS
Roll-on, Roll-off	0.25% Typical; 1.0% Maximum
Load-Life Stability	0.5% ΔR after 2000 hours under Full Rated Power @ +25°C
End Resistance	2Ω Maximum
C.R.V. ³	3Ω Typical; 10Ω Maximum
Frequency Characteristics	10ns rise time @ 1KΩ to 100MHz

TABLE 2 - 1280G AND 1285G SERIES MECHANICAL SPECIFICATIONS

Adjustment Turns	26 $\pm$ 2 turns
Backlash	< 0.05%
Stops	clutch, wiper idles
Sealed	+85°C water immersion
Torque	5oz. in. Maximum
Weight	1.5 grams Maximum
Construction	
Case Material	Valox [®]
Lead Screw	Brass
Wiper	Precious Metal Brush
Rider Block	Nylon
Element	Bulk Metal [®] Foil
Lead Material	Gold Plated Phosphor Bronze

TABLE 3 - STANDARD VALUES

10Ω, 20Ω, 50Ω, 100Ω, 200Ω, 500Ω
1K, 2K, 5K, 10K, 20K

TABLE 4 - ORDERING INFORMATION - 1280G/1285G SERIES PARTS

Please specify Vishay Model 1280G/1285G Precision Trimming Potentiometers as follows:

Example:

1280G	100R	10%
MODEL NO.	RESISTANCE VALUE	TOLERANCE

NOTES:

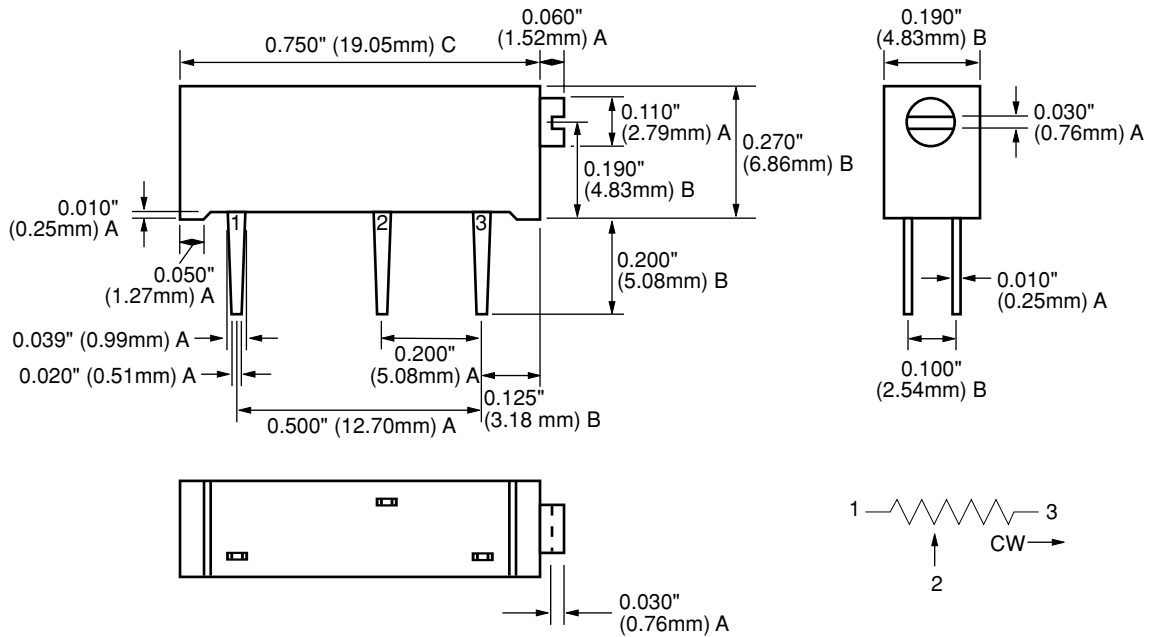
1. 5% Available on Special Order.
2. Typical is a designer's reference which represents that 85% of the units supplied over a long period of time, will be at least the figure shown or better.
3. The 1280G can be screened for low noise, if required.
4. For model 1285G 10 ohms and 20 ohms TCR is $\pm 10\text{ppm}/^{\circ}\text{C}$
5. Panel mount available on special order.

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FIGURE 1 - 1280G / 1285G SCHEMATIC AND DIMENSIONS in inches (millimeters)



TOLERANCES

A = ± 0.005 " (0.13mm)
B = ± 0.010 " (0.25mm)
C = ± 0.015 " (0.38mm)

FIGURE 2 - POWER DERATING CURVE

