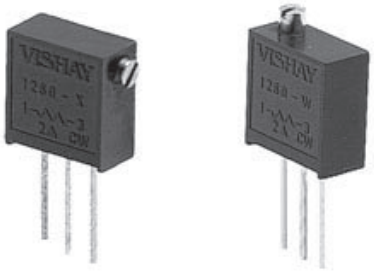
Bulk Metal® Foil Technology
Precision Trimming Potentiometers, 3/8 Inch Square, RJ24 Style, Designed to Meet or Exceed The Requirements of Mil-PRF-39035, Char. H



Product may not be to scale

FEATURES

- Temperature Coefficient of Resistance (TCR): ± 10ppm/°C. (– 55°C to + 150°C Ref. @ + 25°C); Through the wiper[3]; ± 25ppm/°C (see table 2 for low values)
- Load Life Stability: 0.1% Typical ΔR, 1.0% Maximum ΔR under Full Rated Power @ + 85°C for 10,000 hours
- Settability: 0.05% Typical; 0.1% Maximum
- Setting Stability: 0.1% Typical; 0.5% Maximum, ΔSS
- Power Rating: 0.25 watts @ + 85°C
- Resistance Range: 5Ω to 10KΩ
- Resistance Tolerance: ± 5%, ± 10%

TABLE 1 - MODEL SELECTION*

MODEL	TERMINATION STYLE	AVERAGE WEIGHT (g)	STANDARD RESISTANCE VALUES (in Ω)	STANDARD TOLERANCE	POWER RATING @ +85°C AMBIENT	NO. OF TURNS
1260	W-Edge Mount, Top Adjust	0.4	5, 10	± 10%	0.25 W	21 ± 2
	X-Edge Mount, Side Adjust		20, 50, 100, 200, 500, 1K, 2K, 5K, 10K	± 5%		

*See Figure 1, next page..

TABLE 2 - 1260 (RJ24) SERIES ELECTRICAL SPECIFICATIONS[1]

Temperature Coefficient of Resistance (TCR) 50Ω to 10K End-to-End[2]	± 10ppm/°C Maximum (– 55°C to + 25°C) ± 10ppm/°C Maximum (+ 25°C to + 150°C)
Temperature Coefficient of Resistance 5, 10 and 20Ω	± 20ppm/°C
Through the Wiper[3]	± 25ppm/°C
Stability Load Life @ 10,000 Hours	0.1% Typical ΔR 1.0 % Maximum ΔR (Under Full Rated Power of 0.25 watts @ + 85°C)
Power Rating[4]	0.25 watts @ + 85°C
Settability	0.05% Typical; 0.1% Maximum
Setting Stability	0.1% Typical; 0.5% Maximum ΔSS
Contact Resistance Variation – CRV (noise)[5]	3Ω Typical 10Ω Maximum
Hop-off	0.25% Typical; 1.0% Maximum
High-Frequency Operation Rise/Decay Time Inductance Capacitance	To 100MHz 10ns @ 1KΩ 0.08µH Typical 0.5pF Typical
Operating Temperature Range	– 55°C to + 150°C

Refer to last page in this data sheet for footnotes.

TABLE 3 MECHANICAL SPECIFICATIONS

Adjustment Turns	21 ± 2
Mechanical Stops	Wiper Idles – No Discontinuity
Internal Terminations	All Welded – No Flux
Case Material	Diallyl-Phthalate: Black (DAP)
Shaft Torque	3 oz. in. Maximum
Backlash	0.005% Typical

TABLE 4 - ORDERING INFORMATION - 1260 SERIES PARTS

Please specify Vishay Model 1260 Precision Trimming Potentiometers as follows:

Example:

1260	W	100R	5%
MODEL NO.	TERMINATION STYLE	RESISTANCE	TOLERANCE VALUE

See Table 1 for details.
See Figure 1, next page for Standard Marking designation.

TRIMMERS

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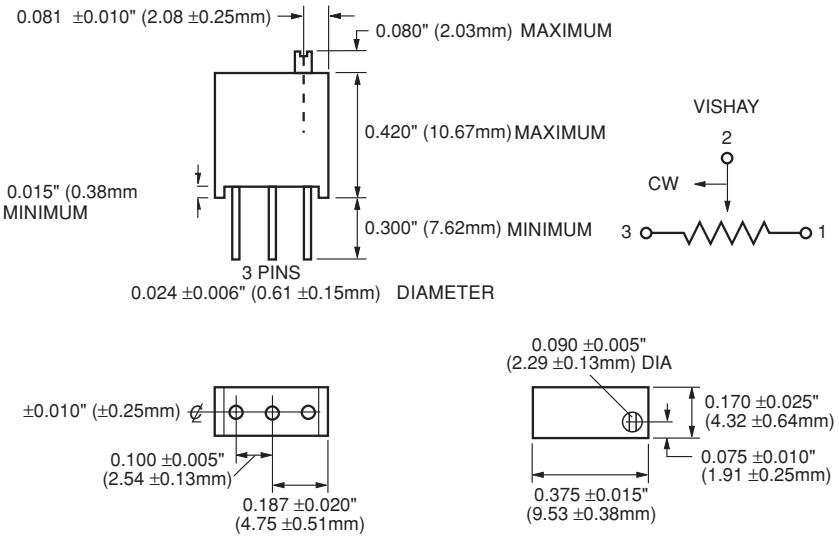
FIGURE 1 - SCHEMATIC AND DIMENSIONS in inches (millimeters)

1260W



STANDARD MARKING
Model No.
Date Code
Resistance Value
Tolerance

NOTES
Adjustment screw 0.090 Inches (2.30mm) diameter with 0.020 Inches (0.51mm) x 0.031 Inches (0.80mm) slot. Model 1268 has solder plated copper terminal pins. 0.024 inches (0.61mm) diameter, 0.300 Inches (7.62mm) length minimum.

1260X

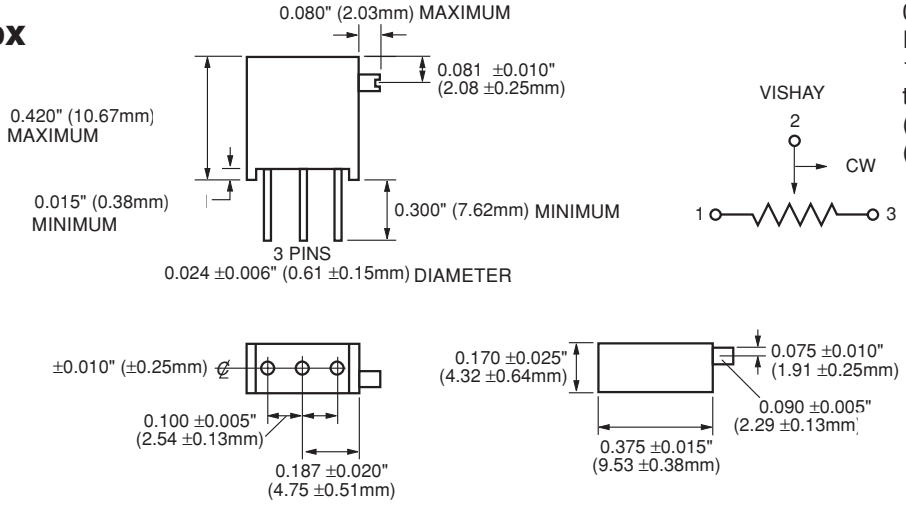


FIGURE 2 - POWER DERATING CURVE

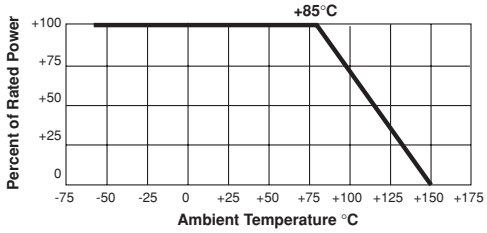


TABLE 5 - COMPARISON

	MIL-PRF-39035/3 CHARACTERISTIC H[6]	1260 MAXIMUM (Worst Case)
TEST GROUP I		
Conditioning	± 1.0 %	± 0.5 %
Contact Resistance Variation – CRV (noise)	± 3.0% or 3Ω[7]	3Ω Typical, 10Ω Maximum
Immersion	No continuous stream of bubbles	No continuous stream of bubbles
TEST GROUP Ia		
Visual and Mechanical	No Failures	No Failures
Actual Effective Electrical Travel	10 to 25 turns	21 ± 2 Turns
End Resistance	2% or 2Ω[7]	2Ω for Values ≤ 1KΩ; 5Ω for Values ≥ 2KΩ;
Dielectric Withstanding Voltage – DWV (Atmospheric and Barometric Pressure)	Per MIL-Std-202, Methods 301 and 105	Per MIL-Std-202, Methods 301 and 105
Insulation Resistance	≥ 1000 Megohms	> 1000 Megohms
Shaft Torque	3oz. in. Maximum	3oz. in. Maximum
Thermal Shock	± 1.0%	± 0.5%
Setting Stability	± 1.0%	± 0.5%
TEST GROUP II		
Solderability	Per MIL-Std-202, Method 208	Per MIL-Std-202, Method 208
TEST GROUP III		
Resistance Temperature Characteristic – TCR	± 0.005% (± 50ppm/°C)	± 0.001% (± 10ppm/°C)
Moisture Resistance	± 1.0%	± 0.5%
Contact Resistance Variation – CRV (noise)	3.0% or 3Ω[7]	3Ω Typical, 10Ω Maximum
TEST GROUP IV		
Settability	± 1.0%	± 0.1%
Shock	± 1.0%	± 0.5%
Setting Stability	± 1.0%	± 0.5%
Vibration	± 1.0%	± 0.5%
Setting Stability	± 1.0%	± 0.5%
Contact Resistance Variation – CRV (noise)	3.0% or 3Ω[7]	3Ω Typical, 10Ω Maximum
Salt Spray	No Corrosion	No Corrosion
TEST GROUP V		
Solder Heat	± 1.0%	± 0.1%
Low-Temperature Operation	± 1.0%	± 0.5%
Setting Stability	± 2.0%	± 0.5%
Low-Temperature Storage	± 1.0%	± 0.5%
High-Temperature Exposure	± 3.0%	± 0.5%
Setting Stability	± 2.0%	± 0.5%
Contact Resistance Variation – CRV (noise)	3.0% or 3Ω[7]	3Ω Typical, 10Ω Maximum
Integrity of Shaft	No Loosening or Breakage	No Loosening or Breakage
TEST GROUP VI		
Rotational Life (200 Cycles)	± 2.0%	± 2.0%
Contact Resistance Variation – CRV (noise)	3.0% or 3Ω[7]	3Ω Typical, 10Ω Maximum
Terminal Strength	2lbs.	2lbs.
TEST GROUP VII		
Life (2,000 Hours) @ + 85°C	± 3.0%	± 0.1% Typical, ± 1.0% Maximum
Life (10,000 Hours) @ + 85°C	± 5.0%	± 0.1% Typical, ± 1.0% Maximum
TEST GROUP VIII		
Solvent Resistance	No Failures	No Failures

VISHAY TRIMMERS ARE INSPECTED 100% For:

- Short-time overload (6.25 x rated power for 5 seconds on; and for 30 seconds off – 3 cycles)
- Immersion
- Resistance tolerance check
- End Resistance
- Visual-Mechanical
- Dynamic tests for Continuity, CRV

By Sample For:

- TCR
- DWV

NOTES:

1. Maximum is 1.0% A.Q.L. standard for all specifications except TCR. (For TCR information, see notes 2 and 3.) "Typical" is a designers reference which represents that 85% of the lots supplied, over a long period of time, will be at least the figure stated or better.
2. Maximum TCR applies to the 3 σ (sigma) limit or 99.73% of a production lot. (Measured end-to-end with wiper off the element.)
3. Measurements of TCR through the wiper are influenced more by setting stability and the percentage of the total resistance in use (at the wiper) than by fundamental resistance change due to temperature alone. The parameter shown in Table 2 is a 2 σ distribution typifying the behavior of the device when used with 40% or more of the total resistance in use.
4. Derated linearly from full power @ + 85°C to zero (0) watts @ + 150°C. See Figure 2 on previous page.
5. Independent of resistance value. 3 ohms maximum available on special request.
6. All ΔR's are measured to the tolerance specified + 0.01 ohms
7. Whichever is greater.

Special Available Options:
Special marking
Burn-in and screening operations

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