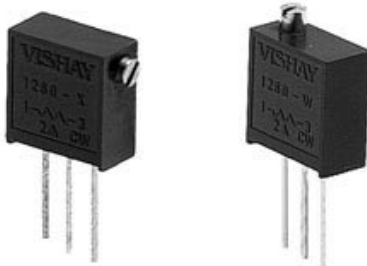


Bulk Metal® Foil Technology Precision Trimming Potentiometers, 3/8 Inch Square, RJ24 Style, Designed to Meet or Exceed the Requirements of MIL-PRF-39035, Char. H



FEATURES

- Temperature coefficient of resistance (TCR): ± 10 ppm/°C (- 55 °C to + 150 °C ref. at + 25 °C); through the wiper²⁾; ± 25 ppm/°C (see table 2 for low values)
- Load life stability: 0.1 % typical ΔR , 1.0 % maximum ΔR under full rated power at + 85 °C for 10 000 h
- Settability: 0.05 % typical; 0.1 % maximum
- Setting stability: 0.1 % typical; 0.5 % maximum
- Power rating: 0.25 W at + 85 °C
- Resistance range: 5 Ω to 10 k Ω
- Resistance tolerance: ± 5 %, ± 10 %
- "O" ring prevents ingress of fluids during any board cleaning operation
- Terminal finishes available: tin/lead

| TABLE 1 - MODEL SELECTION* | | | | |
|----------------------------|---------------------------|--------------------|---------------------------------|--------------|
| MODEL | TERMINATION STYLE | AVERAGE WEIGHT (g) | POWER RATING at + 85 °C AMBIENT | NO. OF TURNS |
| 1260 | W-edge mount, top adjust | 0.4 | 0.25 W | 21 \pm 2 |
| | X-edge mount, side adjust | | | |

Note:

* See figure 1

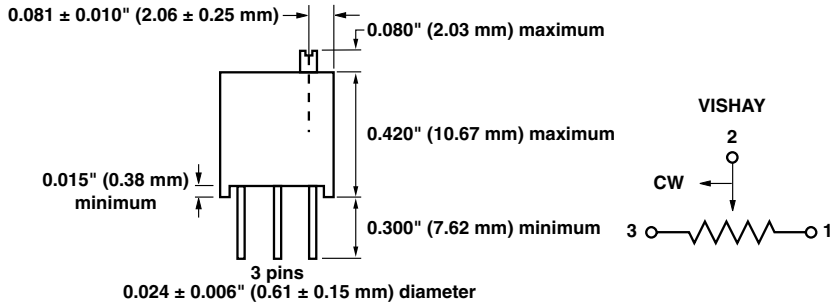
| TABLE 2 - 1260 (RJ26) SERIES ELECTRICAL SPECIFICATIONS | |
|---|---|
| Temperature Coefficient of Resistance (TCR) 50 Ω to 10 k Ω End-to-end ¹⁾ | ± 10 ppm/°C maximum (- 55 °C to + 150 °C, + 25 °C ref.) |
| Temperature Coefficient of Resistance 5, 10 and 20 Ω | ± 20 ppm/°C |
| Through the wiper ²⁾ | ± 25 ppm/°C |
| Stability Load life at 10 000 h | 0.1 % typical ΔR 1.0 % maximum ΔR (under Full Rated Power of 0.25 W at + 85 °C) |
| Power Rating ³⁾ | 0.25 W at + 85 °C |
| Settability | 0.05 % typical; 0.1 % maximum |
| Setting Stability | 0.1 % typical; 0.5 % maximum |
| Contact Resistance Variation - CRV (noise) | 3 Ω typical; 10 Ω maximum |
| Hop-off | 0.25 % typical; 1.0 % maximum |
| High-Frequency Operation Rise/decay time Inductance Capacitance | 1 ns without ringing 0.08 μ H typical 0.5 pF typical |
| Operating Temperature Range | - 55 °C to + 150 °C |

| TABLE 3 - VALUES VS. TOLERANCES | |
|---|--------------------|
| STANDARD RESISTANCE VALUES (in Ω) | STANDARD TOLERANCE |
| 5, 10 | ± 10 % |
| 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K | ± 5 % |

| TABLE 4 - MECHANICAL SPECIFICATIONS | |
|-------------------------------------|--------------------------------|
| Adjustment Turns | 21 \pm 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 |

FIGURE 1 - SCHEMATIC AND DIMENSIONS in inches (millimeters)

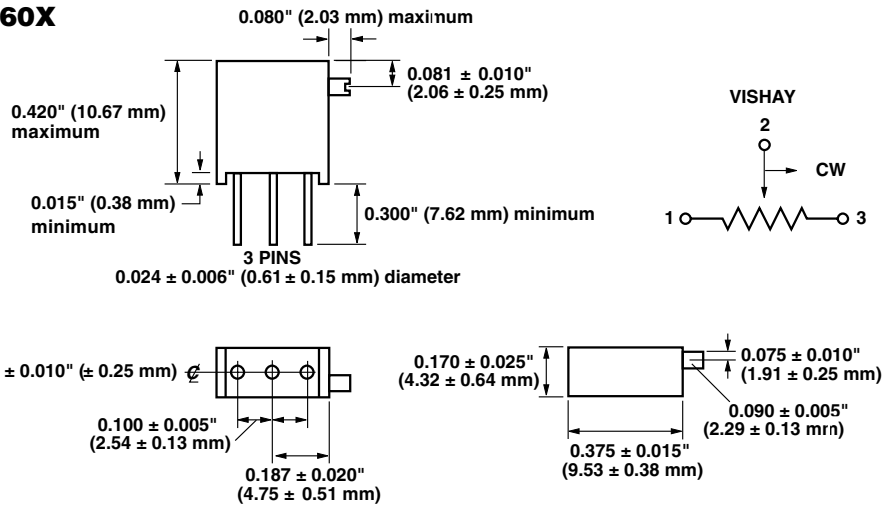
1260W



STANDARD MARKING

- Model No.
- Date Code
- Resistance Value
- Tolerance

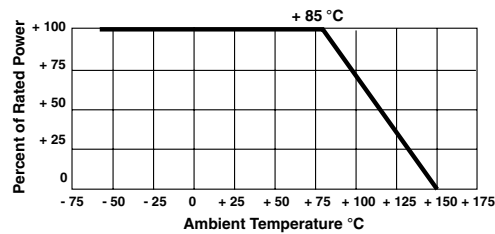
1260X



Notes:

Adjustment screw 0.090" (2.29 mm) diameter with 0.020" (0.51 mm) x 0.031" (0.79 mm) slot. model 1260 has solder plated copper terminal pins. 0.024" (0.61 mm) diameter, 0.300" (7.62 mm) length minimum.

FIGURE 2 - POWER DERATING CURVE





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

Vishay Foil Resistors

| TABLE 5 - COMPARISON | | |
|--|---|---|
| | MIL-PRF-39035/3 CHARACTERISTIC H ⁴⁾ | 1260 MAXIMUM |
| TEST GROUP I Conditioning Contact resistance variation - CRV (noise) Immersion | ± 1.0 % ± 3.0 % or 3 Ω ⁵⁾ No continuous stream of bubbles | ± 0.5 % 3 Ω typical, 10 Ω maximum No continuous stream of bubbles |
| TEST GROUP Ia Visual and mechanical Actual effective electrical travel End resistance Dielectric withstanding voltage - DWV (Atmospheric and barometric pressure) Insulation resistance Shaft torque Thermal shock Setting stability | No failures 10 to 25 turns 2 % or 2 Ω ⁵⁾ Per MIL-STD-202, methods 301 and 105 ≥ 1000 MΩ 3 oz. in. maximum ± 1.0 % ± 1.0 % | No failures 21 ± 2 turns 2 Ω for values ≤ 1 kΩ; 5 Ω for values ≥ 2 kΩ; Per MIL-STD-202, methods 301 and 105 > 1000 MΩ 3 oz. in. maximum ± 0.5 % ± 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 Moisture resistance Contact resistance variation - CRV (noise) | ± 0.005 % (± 50 ppm/°C) ± 1.0 % 3.0 % or 3 Ω ⁵⁾ | ± 0.001 % (± 10 ppm/°C) ± 0.5 % 3 Ω typical, 10 Ω maximum |
| TEST GROUP IV Settability Shock Setting stability Vibration Setting stability Contact resistance variation - CRV (noise) Salt spray | ± 1.0 % ± 1.0 % ± 1.0 % ± 1.0 % ± 1.0 % ± 1.0 % 3.0 % or 3 Ω ⁵⁾ No corrosion | ± 0.1 % ± 0.5 % ± 0.5 % ± 0.5 % ± 0.5 % ± 0.5 % 3 Ω typical, 10 Ω maximum No corrosion |
| TEST GROUP V Solder heat Low-temperature operation Setting stability Low-temperature storage High-temperature exposure Setting stability Contact resistance variation - CRV (noise) Integrity of shaft | ± 1.0 % ± 1.0 % ± 2.0 % ± 1.0 % ± 3.0 % ± 2.0 % 3.0 % or 3 Ω ⁵⁾ No loosening or breakage | ± 0.1 % ± 0.5 % ± 0.5 % ± 0.5 % ± 0.5 % ± 0.5 % 3 Ω typical, 10 Ω maximum No loosening or breakage |
| TEST GROUP VI Rotational life (200 cycles) Contact resistance variation - CRV (noise) Terminal strength | ± 2.0 % 3.0 % or 3 Ω ⁵⁾ 2 lbs. | ± 2.0 % 3 Ω typical, 10 Ω maximum 2 lbs. |
| TEST GROUP VII Life (2000 h) at + 85 °C Life (10 000 h) at + 85 °C | ± 3.0 % ± 5.0 % | ± 0.1 % typical, ± 1.0 % maximum ± 0.1 % typical, ± 1.0 % maximum |
| TEST GROUP VIII Solvent resistance | No failures | No failures |

Notes:

- Maximum TCR applies to the 3 s (sigma) limit or 99.73 % of a production lot. (Measured end-to-end with wiper off the element.)
- 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 s distribution typifying the behavior of the device when used with 40 % or more of the total resistance in use.
- Derated linearly for full power at + 85 °C to zero (0) W at + 150 °C. See figure 2.
- All ΔR's are measured to the tolerance specified + 0.01 Ω.
- Whichever is greater.
Special available options:
Special marking
Power conditioning and screening operations.

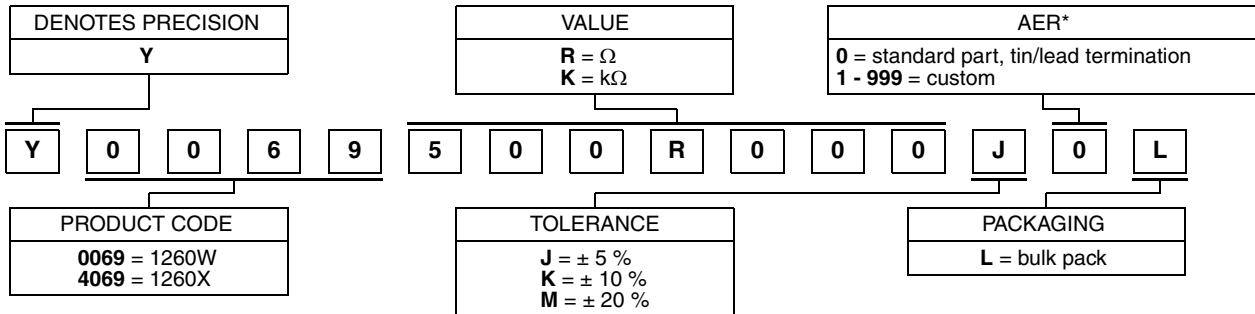
VISHAY TRIMMERS ARE INSPECTED

- 100 % for:
- Short-time overload (6.25 x rated power for 5 s on; and for 30 s off - 3 cycles)
 - Immersion
 - Resistance tolerance check
 - End resistance
 - Visual-mechanical
 - Dynamic tests for continuity, CRV
- By sample for:
- TCR
 - DWV



TABLE 6 - GLOBAL PART NUMBER INFORMATION

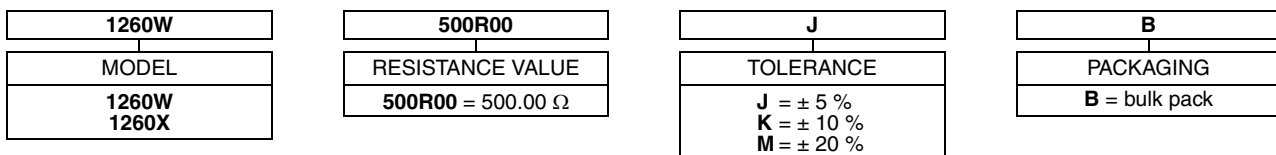
NEW GLOBAL PART NUMBER: Y0069500R000J0L (preferred part number format)



FOR EXAMPLE: ABOVE GLOBAL ORDER Y0069 500R000 J 0 L:

TYPE: 1260W
 VALUE: 500.0 Ω
 ABSOLUTE TOLERANCE: ± 5.0 %
 AER: standard part, tin/lead termination
 PACKAGING: bulk pack

HISTORICAL PART NUMBER: 1260W 500R00 J B (will continue to be used)



Note

* Application engineering release: for non-standard requests, please contact application engineering.



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