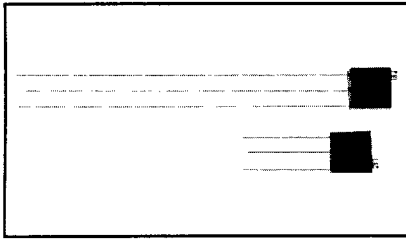


MODELS 12^S, 14^S, 15^S, 17^S, 18^S Wirewound Trimmers

1/4" [6.35mm] Square, Fully Sealed



FEATURES

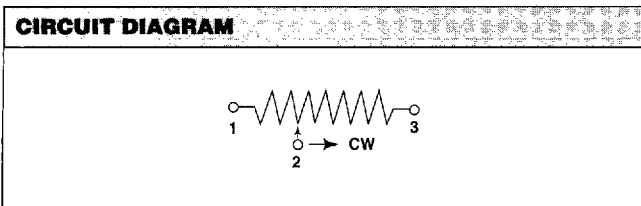
- Precious metal wiper
- 0.25 watt to + 85°C
- TCR < 50PPM/°C
- Solderable leads
- Special configurations available
- Military quality at affordable prices

APPLICATIONS

Wirewound trimmers are particularly useful in those applications where any combination of high power, low temperature coefficient of resistance and/or excellent long term life stability are important design considerations.

STANDARD RESISTANCE VALUES	
RESISTANCE* (Ohms)	NOMINAL RESOLUTION (%)
10	1.65
20	1.35
50	1.13
100	.82
200	.62
500	.62
1k	.49
2k	.34
5k	.27
10k	.21
20k	.17
25k	.16

* Other resistances available upon request.



ELECTRICAL SPECIFICATIONS

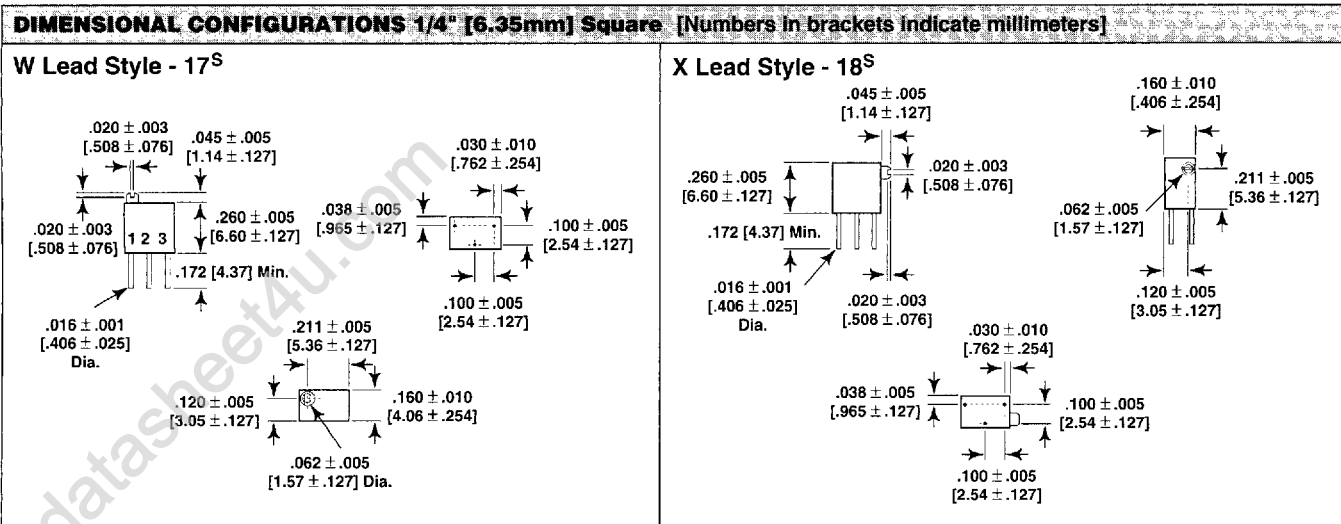
- Electrical Travel:** 22 ± 4 turns.
- Resistance Range:** 10 ohm to 5 kilohm. Extended range available in non MIL-Spec product.
- Resistance Tolerance:** ± 5% standard. Closer tolerances available.
- Temperature Coefficient:** (- 65°C to + 150°C) ± 50PPM/°C.
- Power Rating:** 0.5 watt at + 85°C derated to 0 watt at + 150°C. These specifications exceed MIL-Spec.
- End Resistance:** 1 ohm or 2%, whichever is greater.
- Equivalent Noise Resistance (ENR):** 100 ohm maximum.
- Dielectric (DWV):** 1000 VAC at atmospheric pressure. These specifications exceed MIL-Spec.
- Insulation Resistance:** > 100,000 Megohm (500 VDC). These specifications exceed MIL-Spec.

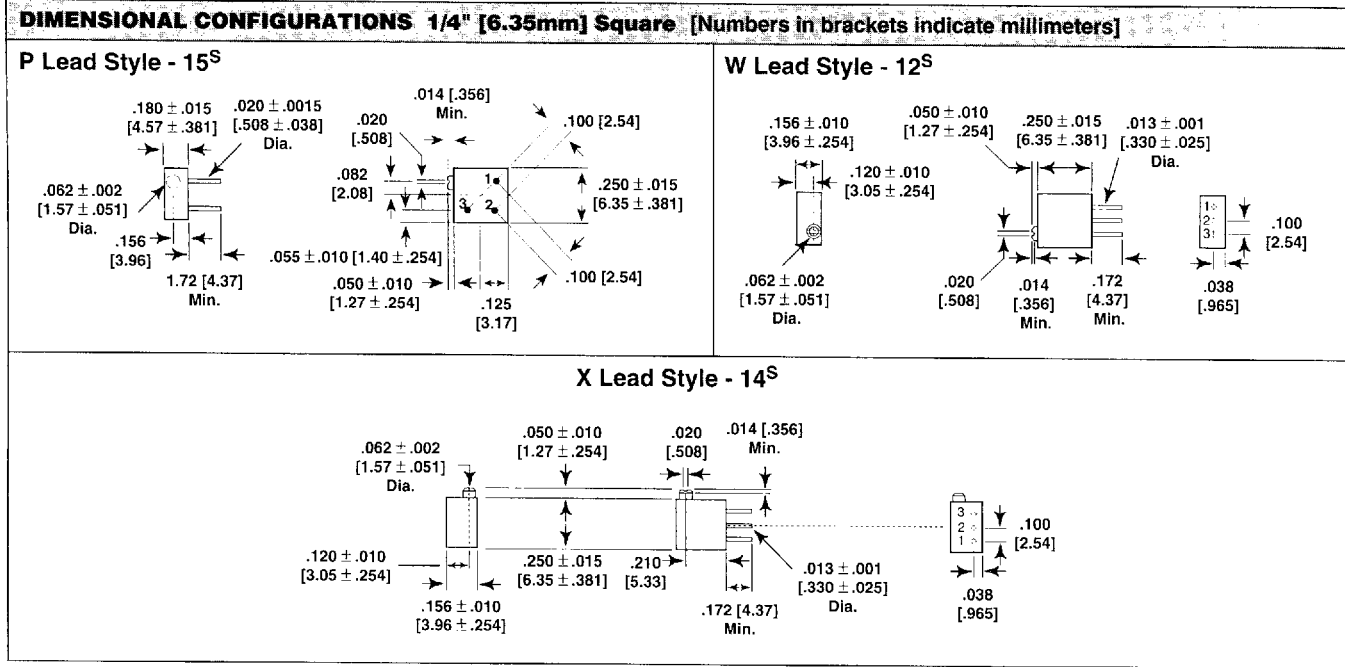
MECHANICAL SPECIFICATIONS

- Operating Torque:** 3 ounce inch maximum, 17^S and 18^S. 5 ounce inch maximum, 12^S, 14^S and 15^S.
- Rotation:** Clutch stop, wiper idles.
- Weight:** 0.935 grams maximum.
- Resistive Element:** Nickel chromium.
- Rotational Life:** 200 cycles minimum.
- Terminal Strength:** 2 pounds for 10 seconds.

ENVIRONMENTAL SPECIFICATIONS

- Temperature Limits:** - 65°C to + 175°C.
- Sealing:** Fully sealed case (non-hermetic).

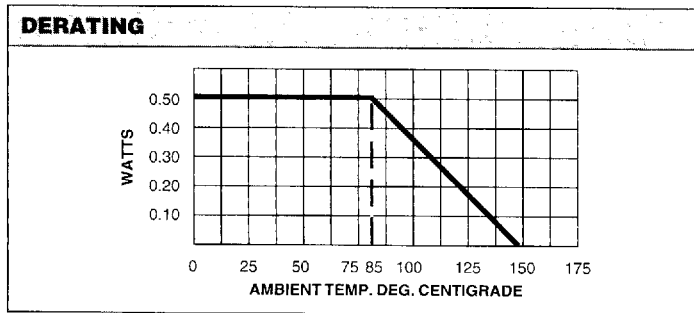




ENVIRONMENTAL PERFORMANCE

TEST ¹	CONDITIONS	MIL-R-27208 REQUIREMENT	TYPICAL CHANGE
Thermal Shock (107)	5 cycles, - 55°C to + 125°C	$\Delta R \leq 1.0\%^2$	$\Delta R < 0.02\%$
Low Temperature Operation	1 hour storage, 45 minutes rated power at - 55°C	$\Delta R \leq 1.0\%^2, 3$	$\Delta R < 0.01\%$
High Temperature Exposure	250 hours, no load at + 150°C	$\Delta R \leq 1.0\%^2, 3$	$\Delta R < 0.03\%$
Moisture Resistance (106)	240 hours at rated power with humidity ranging from 80% RH to 98% RH	$\Delta R \leq 1.0\%^2$	$\Delta R < 0.02\%$
Resistance to Soldering Heat (210)	+ 350°C for 3 seconds	$\Delta R \leq 1.0\%^2$	$\Delta R < 0.01\%$
Shock (213)	18 shocks, 100g, 6 ms, sawtooth, 3 axes	$\Delta R \leq 1.0\%^2, 3$	$\Delta R < 0.07\%$
Vibration (204)	10 to 2000 Hz, 20g, 12 hours, 3 axes	$\Delta R \leq 1.0\%^2, 3$	$\Delta R < 0.02\%$
Rotational Life	200 cycles	$\Delta R \leq 2.0\%$	$\Delta R < 0.04\%$
Load Life (108)	1,000 hours at rated power at + 85°C, 90°/30° cycle	$\Delta R \leq 2.0\%$	$\Delta R < 0.12\%$

- Numbers in parenthesis refer to test method MIL-STD-202 as modified by the detail specification.
- For values below 100 ohm, add 0.05 ohm to the allowable change.
- The referenced tests also require that setting stability change shall not exceed ± 1.0 percent plus the specified maximum resolution and operating torque shall not exceed 150% of the specified maximum.



- PART MARKING**
- Manufacturer's name or code
 - Wiring diagram
 - Date code
 - Resistance
 - MIL-Spec part number (when applicable)

HOW TO ORDER

12^S
MODEL

12^S = Top Adjustment Screw
 14^S = Side Adjustment Screw
 15^S = PC Mount
 17^S = Top Adjustment Screw
 18^S = Side Adjustment Screw

501
VALUE

First two digits are significant figures. Last digit specifies number of zeros to follow.