

## Features

- Multiturn / Wirewound / Sealed
- [Listed on the QPL](#) per MIL-R-27208 and High-Rel MIL-R-39015
- [Panel Mount option](#) available
- RoHS compliant†

# RT22/RTR22 - 1/2" Square Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range  
 RT22 .....50 to 20K ohms  
 RTR22 .....500 to 20K ohms  
 (see standard resistance table)  
 Resistance Tolerance .....±5 % std.  
 (tighter tolerance available)  
 Absolute Minimum Resistance  
 .....0.1 % or 1 ohm max. (whichever is greater)  
 Noise .....100 ohms ENR max.  
 Resolution .....See Resistance Table  
 Insulation Resistance .....500 vdc.  
 1,000 megohms min.  
 Dielectric Strength  
 Sea Level .....1,000 vac  
 80,000 Feet .....400 vac  
 Adjustment Travel .....25 turns nom.

### Environmental Characteristics

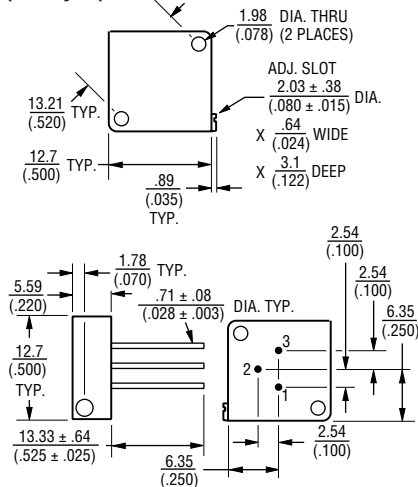
Power Rating @ 85 °C .....0.75 watt  
 Power Rating @ 150 °C .....0 watt  
 Temperature Range .....-65 °C to +150 °C  
 Temperature Coefficient .....±50 ppm/°C  
 Seal Test .....85 °C Fluorinert\* (pin styles only)  
 Humidity .....MIL-STD-202 Method 106  
 RT22 .....(1 % ΔTR; 10 Megohms IR)  
 RTR22 .....(1 % ΔTR; 100 Megohms IR)  
 Vibration .....30 G  
 (1 % ΔTR; 0.5 % + resolution ΔVR)  
 Shock .....100 G  
 (1 % ΔTR; 0.5 % + resolution ΔVR)  
 Load Life  
 RT22 .....1,000 hours 0.75 watt @ 85 °C  
 (2 % ΔTR; 2 % + resolution ΔVR)  
 RTR22 .....10,000 hours 0.75 watt @ 85 °C  
 (3 % ΔTR; 2 % + resolution ΔTR)  
 Rotational Life .....200 cycles  
 (2 % ΔTR)

### Physical Characteristics

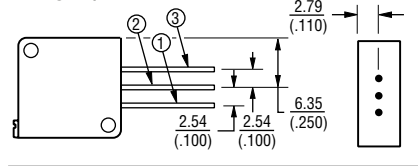
Torque .....5.0 oz-in. max.  
 Mechanical Stops .....Wiper idles  
 Terminals  
 .....Flexible leads (7 strands of 30 AWG)  
 MIL-STD-202; Method 208  
 Weight .....0.06 oz.  
 Machine Screw Mounting  
 Torque .....12 oz-in. max.  
 Marking .....Mil-spec part number  
 Wiper .....50 % (Actual TR) ±10 %  
 Flammability .....U.L. 94V-0  
 Standard Packaging  
 P, W & X Styles .....25 pcs. per tube  
 L Style .....25 pcs. per bag  
 Adjustment Tool .....H-90

### Product Dimensions

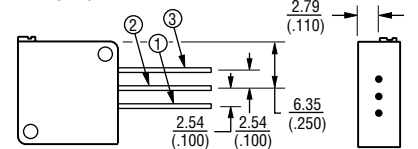
#### RT22C2P/RTR22DP Common Dimensions (Pin Styles)



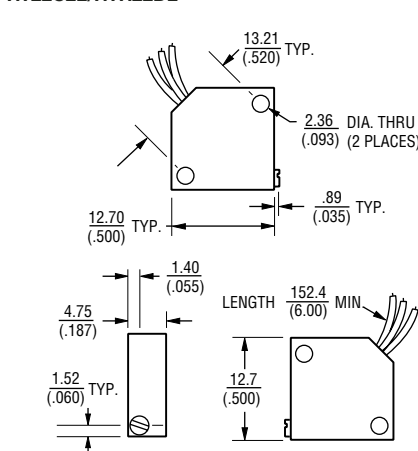
#### RT22C2W/RTR22DW



#### RT22C2X/RTR22DX



#### RT22C2L/RTR22DL



### How To Order

MIL-PRF-27208 RT22 C2 P 501

Model \_\_\_\_\_  
 Characteristic \_\_\_\_\_  
 C = ±50 ppm/°C Temp. Coeff. Max.  
 2 = 85 °C Rating Temp.  
 150 °C Max. Operating Temp.  
 Terminal Style \_\_\_\_\_  
 Resistance Code \_\_\_\_\_

### How To Order

MIL-PRF-39015 RTR22 D P 501 M

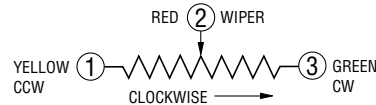
Model \_\_\_\_\_  
 Characteristic \_\_\_\_\_  
 D = ±50 ppm/°C Temp. Coeff. Max.  
 Terminal Style \_\_\_\_\_  
 Resistance Code \_\_\_\_\_  
 Failure Rate \_\_\_\_\_  
 M = 1.0 %

### RT22 Standard Resistance Table

Resistance (Ohms)	Resistance Code	Nominal Resolution (Percent)
50	500	0.80
100	101	0.90
200	201	0.70
500	501	0.60
1,000	102	0.40
2,000	202	0.30
5,000	502	0.25
10,000	103	0.19
20,000	203	0.16

### RTR22 Standard Resistance Table

Resistance (Ohms)	Resistance Code	Nominal Resolution (Percent)
500	501	0.60
1,000	102	0.40
2,000	202	0.30
5,000	502	0.25
10,000	103	0.19
20,000	203	0.16



TOLERANCES: ± 0.25 (.010) EXCEPT WHERE NOTED

DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*"Fluorinert" is a registered trademark of 3M Co.

†RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.