

The World Leader in the Design of Trimmer Capacitors.



The Trimmer Capacitor Company



Tuning Solutions for Today's Technology

VOLTRONICS CORPORATION

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"P" Series - Sealed Sapphire Trimmer Capacitors

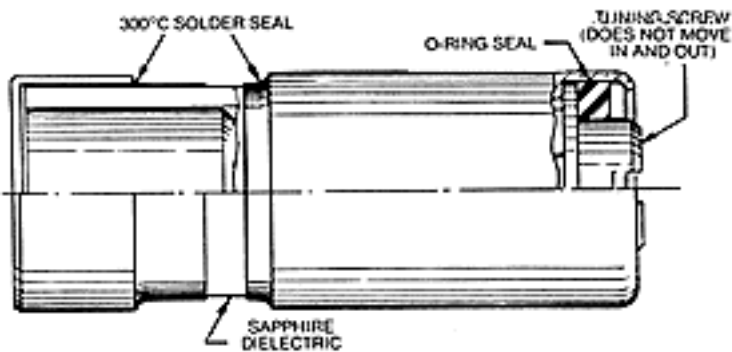


THE "P" LINE OFFERS:

- High Q, low temperature coefficient, and internal seal
- Low self-inductance for use to 10 GHz
- Interchangeability with unsealed designs
- Long life, no measurable tuning noise

Voltronics "P" line of sapphire subminiature trimmer capacitors is a unique design. The trimmers have high Q, zero temperature coefficient, and are internally O-ring sealed to keep out flux and cleaning fluid. Yet, sizes are the same as the MIL unsealed styles.

The tuning screw does not move in and out, and RF current does not run along it. Sapphire is ideal for precision trimmer capacitors. Its dielectric constant does not change with frequency, and its loss constant is extremely stable, measuring below 0.0003 up to 10 GHz. Sapphire is chemically inert, totally moisture resistant, and mechanically strong.

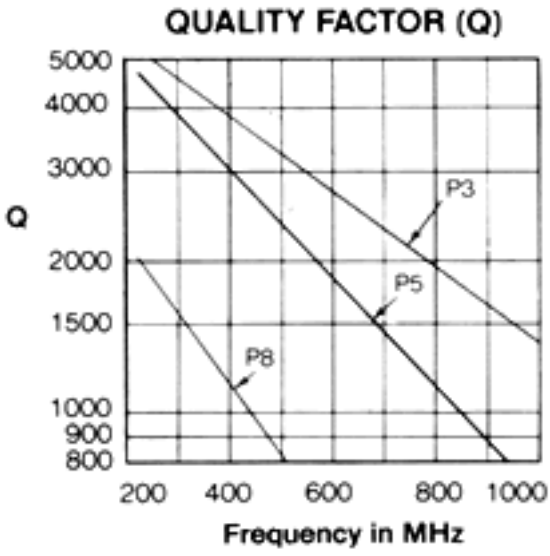


"P" Series - Sealed Sapphire Trimmer Capacitors

GENERAL SPECIFICATIONS

- D.C. Working Voltage: 500
- D.C. Withstanding Voltage: 1000
- Seal: Internal O-ring
- Operating Temperature: -55° C to +125° C
- Mechanical Shock: 100 g's 6 ms
- Vibration: 60 g's, 10-2000 Hz
- Tuning Torque: 0.2 to 2.0 inch ounces
- Insulation Resistance: 10^5 megohms
- Temperature Coefficient: 0 ± 50 ppm/° C (0 ± 75 ppm/° C on P8 size)

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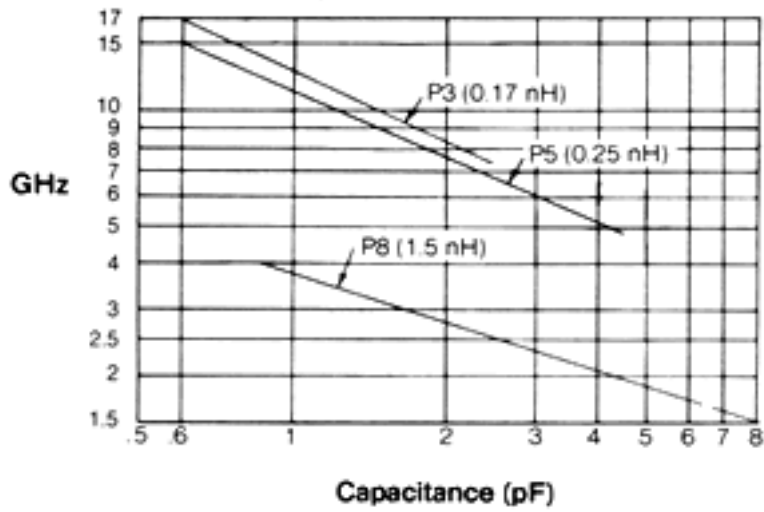


High Frequency Data*

*This high frequency data was taken on a Boonton Model 34A Resonant Coaxial-line with the parts set at their maximum rated capacitance values. Connections to the parts were made directly on the body of the capacitors.

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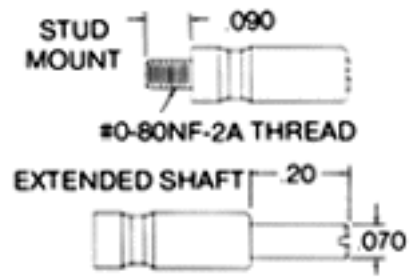
SELF-RESONANT FREQUENCY



High Frequency Data*

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Optional Configurations

STUD MOUNT

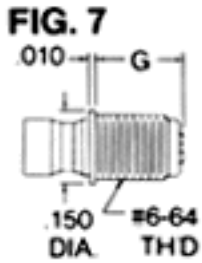
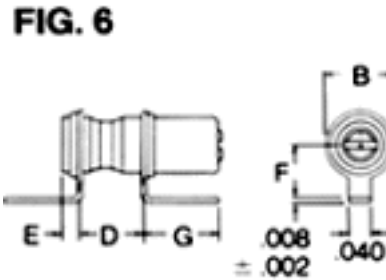
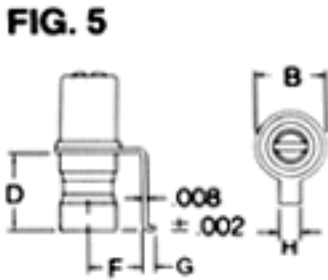
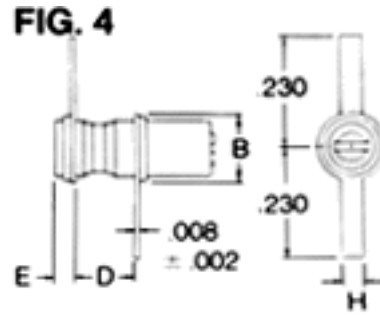
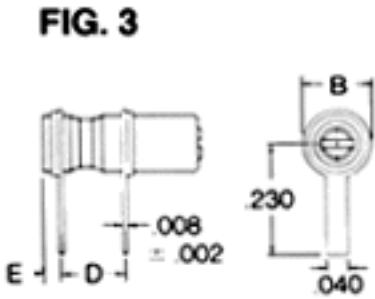
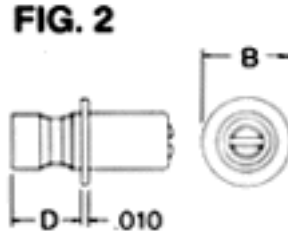
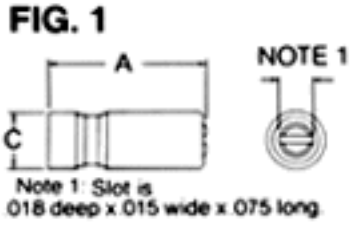
Add "N" to type designation (Example: P5N)

EXTENDED SHAFT

Add "E" to type designation (Example: P8AE)

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See below for Capacitance Range, Minimum Q and Tolerances



Type	Fig.	Capacitance Range (pF)		Q(Min.) 250 MHz	Tolerances (where not specified) ±.016							
		From Below	To Above		A (max)	B DIA.	C± .005	D± .010	E± .010	F	G	H± .005
P3A	1	0.6	2.5	4,000	.240	-	.118	-	-	-	-	-
P5A	1	0.6	4.5	3,000	.329	-	.118	-	-	-	-	-
P8A	1	0.8	8.0	1,500	.495	-	.118	-	-	-	-	-
P3D	2	0.6	2.5	4,000	.240	.190	.118	.100	-	-	-	-
P5D	2	0.6	4.5	3,000	.329	.190	.118	.150	-	-	-	-
P8D	2	0.8	8.0	1,500	.495	.190	.118	.230	-	-	-	-
P3B	3	0.6	2.5	4,000	.240	.140	.118	.082	.014	-	-	-
P5B	3	0.6	4.5	3,000	.329	.140	.118	.130	.034	-	-	-

P8B	3	0.8	8.0	1,500	.495	.140	.118	.250	.036	-	-	-
P3C	4	0.6	2.5	4,000	.240	.140	.118	.056	.018	-	-	.093
P5C	4	0.6	4.5	3,000	.329	.140	.118	.060	.060	-	-	.093
P8C	4	0.8	8.0	1,500	.495	.140	.118	.050	.148	-	-	.093
P3F	5	0.6	2.5	4,000	.240	.140	.118	.090	-	.110	.025	.04
V6064	5	0.6	2.5	4,000	.240	.140	.118	.090	-	.110	.025	.09
V6034	5	0.6	4.5	3,000	.329	.140	.118	.160	-	.110	.025	.09
V6047	5	0.6	4.5	3,000	.329	.140	.118	.160	-	.140	.100	.04
P5F	5	0.6	4.5	3,000	.329	.140	.118	.160	-	.110	.025	.04
P8F	5	0.8	8.0	1,500	.495	.140	.118	.250	-	.110	.025	.04
P3J	6	0.6	2.5	4,000	.240	.140	.118	.082	.014	.070	.160	-
P5J	6	0.6	4.5	3,000	.329	.140	.118	.130	.034	.070	.160	-
P8J	6	0.8	8.0	1,500	.495	.140	.118	.250	.036	.070	.160	-
P3M	7	0.6	2.5	4,000	.240	-	.118	-	-	-	.125	-
P5M	7	0.6	4.5	3,000	.329	-	.118	-	-	-	.160	-
P8M	7	0.8	8.0	1,500	.495	-	.118	-	-	-	.230	-

Note: For diameter and length dimensions on figures 2-7, see figure 1.

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Recommended Tuning Tool: TT-100

Metal Tipped			
Part #	Tip A	Tip B	Capacitor Series
TT-100	.110X.018	-	A, E, K KE DRO, Glass, NT
-	-	.070X.12	P
TT-200	.110X.018	-	A, E, K KE, DRO, Glass, NT
-	-	.032X.088	----
TT-300	.060X.018	-	A1, A3
-	-	.070X.012	P
TT-400	.060X.018	-	A1, A3
-	-	.036X.012	A2, A4

Ceramic Tipped Non-Magnetic		
Part #	Tip A	Capacitor Series
TT-500	.07X.016	A1, A3, A, E, K, KE, DRO
TT-600	.10X.016	Glass, NT
TT-700	.050X.016	P
TT-900	.038X.016	A2, A4

The TT-500 thru TT-900 tuning tools are ideal for continual use. They fit into the hand with the rotatable top fixed in the palm. The tip is made of high strength ceramic. Use this tool where metal tip affects tuning.