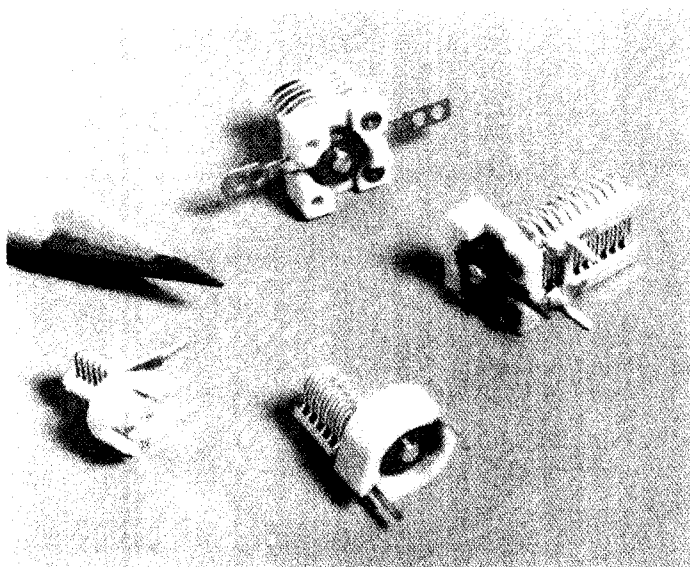


AIRTRIM® AIR DIELECTRIC SINGLE TURN TRIMMER CAPACITORS

FEATURES:

- Rotor and stator machined from solid brass
- Oversized rotor bushing and secure rotor terminal for lowest contact resistance*
- Highest quality spring design for more uniform adjust torque and longer adjust life*
- Solid rivets are shrink fitted for sturdier stator mounting
- Most models are adjustable from both ends
- Full 360° slotted adjust head for secure engagement of tuning tool*
- Leads are tinned for solderability
- Silver plating is standard for rotors and stators—other plating finishes are available
- Wide variety of forms and mounting configurations*
- Fully impregnated ceramic base (high density steatite)
- Custom design capability for special needs (special mountings, adjust shafts, etc.)

*standard series



PART NUMBERING SYSTEM

GA

AIR DIELECTRIC

J

FORM FACTOR AND DESIGN

Symbol	Description
D	Std. Series Screw Mt.
E	Std. Series P.C. 2-Pin Mt.
F	Std. Series Panel Mt.
G	Std. Series P.C. Side Mt.
H	Std. Series P.C. 4-Pin Mt.
I	Economy Line P.C. Mt.
J	Mini Series P.C. 2-Pin Mt.
K	Mini Series P.C. Side Mt.
L	Mini Series Substrate Top Mt.
M	Mini Series Substrate Side Mt.

6R1

MAXIMUM RATED CAPACITANCE

Expressed in picofarads and identified by a three-digit number. First two digits are significant figures, the last digit specifies the number of zeros to follow. For values below 10 pF, the letter "R" is used as the decimal point and the last digit becomes significant. For example, 8R5 = 8.5 pF, 110 = 11 pF, 121 = 120 pF, etc. See table for exact value.

00

MODIFICATIONS

Symbol	Description
00	Standard
01	Gold plated
02	Rhodium plated
03	Nickel plated
04	Tin Plated

Other Modifications Available:
 Extended adjust shaft
 Insulated adjust shaft
 Dust Cover
 Special mounting configurations
 Special capacitance ranges
 Special air gaps
 Differential and split stator

MINIATURE SERIES

Specifications:

- Operating temperature range: -55°C to +85°C
- Test voltage: 400 VDC
- Working voltage: 200 VDC
- Insulation resistance: >25,000 megohms

- Adjust torque: 1.5 to 7.0 oz.-in.
- Temperature coefficient: +10 ± 10 PPM/°C, measured over temperature range of -30°C to 80°C at 1 MHz and 50% R.H.
- Typical Q: 8,000 at 1 MHz, 6,000 at 50 MHz, 4,000 at 100 MHz, 1,500 at 200 MHz
- Nominal air gap: .008" (0.20 mm)

TABLE 1

GAJ Series Model No.	GAK Series Model No.	GAL Series Model No.	GAM Series Model No.	CAP. RANGE (pF) Rated 6/89		HEIGHT (H)	
				C (min.)	C (max.)	± .020 (in.)	± 0.5 (mm)
GAJ3R700	GAK3R700	GAL3R700	GAM3R700	1.1	3.3	.295	7.5
GAJ6R100	GAK6R100	GAL6R100	GAM6R100	1.2	5.2	.331	8.4
GAJ8R200	GAK8R200	GAL8R200	GAM8R200	1.4	7.0	.366	9.3
GAJ10000	GAK10000	GAL10000	GAM10000	1.5	8.8	.402	10.2
GAJ12000	GAK12000	GAL12000	GAM12000	1.8	10.3	.437	11.1
GAJ15000	GAK15000	GAL15000	GAM15000	2.0	12.3	.472	12.0
GAJ17000	GAK17000	GAL17000	GAM17000	2.1	14.5	.508	12.9
GAJ19000	GAK19000	GAL19000	GAM19000	2.3	15.8	.543	13.8
GAJ21000	GAK21000	GAL21000	GAM21000	2.4	17.9	.579	14.7
GAJ23000	GAK23000	GAL23000	GAM23000	2.7	19.8	.614	15.6
GAJ25000	GAK25000	GAL25000	GAM25000	2.9	21.4	.650	16.5

STANDARD SERIES

Specifications:

- Operating temperature range: -55°C to +85°C
- Test voltage: 650 VDC
- Working voltage: 325 VDC

- Insulation resistance: >25,000 megohms
- Adjust torque: 2.5 to 7.0 oz.-in.
- Temperature coefficient: +55 ± 35 PPM/°C, measured over temperature range of -30°C to +80°C at 1 MHz & 50% R.H.
- Typical Q: 7,000 at 1 MHz, 5,000 at 50 MHz, 3,000 at 100 MHz, 1,000 at 200 MHz
- Nominal air gap: .010" (0.25 mm)

STANDARD SERIES (11 x 11.5 mm)
TABLE 2

GAD Series Model No.	GAE Series Model No.	GAH Series Model No.	CAP. RANGE (pF)		HEIGHT (H)	
			C (min.)	C (max.)	± .020 (in.)	± 0.5 (mm)
GAD4R000	GAE4R000	GAH4R000	1.5	4.0	.374	9.5
GAD6R500	GAE6R500	GAH6R500	1.7	6.5	.425	10.8
GAD8R800	GAE8R800	GAH8R800	1.8	8.8	.476	12.1
GAD11000	GAE11000	GAH11000	1.9	10.8	.528	13.4
GAD14000	GAE14000	GAH14000	2.1	13.3	.579	14.7
GAD16000	GAE16000	GAH16000	2.2	16.0	.630	16.0
GAD19000	GAE19000	GAH19000	2.3	18.5	.681	17.3
GAD21000	GAE21000	GAH21000	2.5	21.0	.732	18.6
GAD24000	GAE24000	GAH24000	2.6	23.5	.783	19.9

TABLE 3

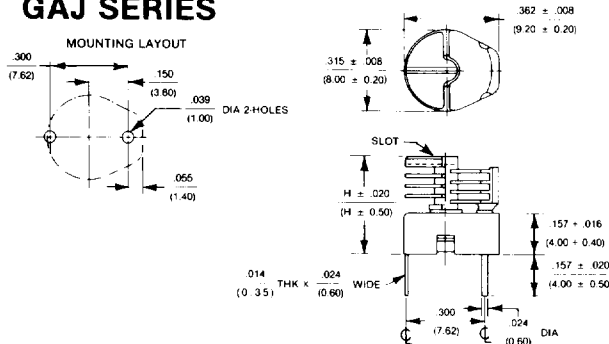
GAF Series Model No.	CAP. RANGE (pF)		HEIGHT (H)	
	C (min.)	C (max.)	± .020 (in.)	± 0.5 (mm)
GAF4R300	1.9	4.3	.413	10.5
GAF6R800	2.1	6.8	.465	11.8
GAF9R100*	2.2	9.1	.516	13.1
GAF12000	2.3	11.2	.567	14.4
GAF14000*	2.5	13.8	.618	15.7
GAF17000	2.6	16.5	.669	17.0
GAF19000	2.7	19.0	.721	18.3
GAF22000*	2.8	21.5	.772	19.6
GAF24000	2.9	24.0	.823	20.9

TABLE 4

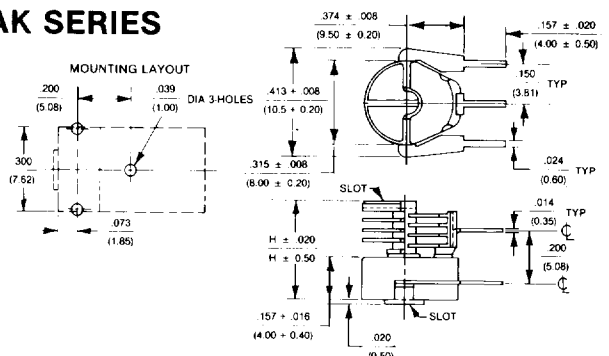
GAG Series Model No.	CAP. RANGE (pF)		HEIGHT (H)	
	C (min.)	C (max.)	± .020 (in.)	± 0.5 (mm)
GAG4R000	1.7	4.0	.354	9.0
GAG6R500	1.9	6.5	.406	10.3
GAG8R800*	2.0	8.8	.457	11.6
GAG11000	2.1	10.8	.508	12.9
GAG14000*	2.3	13.3	.559	14.2
GAG17000	2.5	16.5	.610	15.5
GAG19000	2.7	19.0	.661	16.8
GAG22000*	2.8	21.5	.713	18.1
GAG24000	2.9	24.0	.764	19.4

*Preferred models

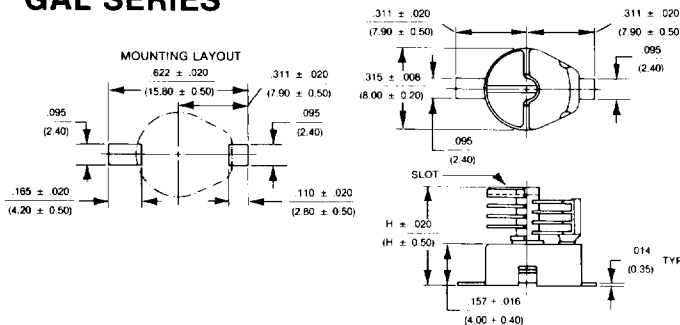
GAJ SERIES



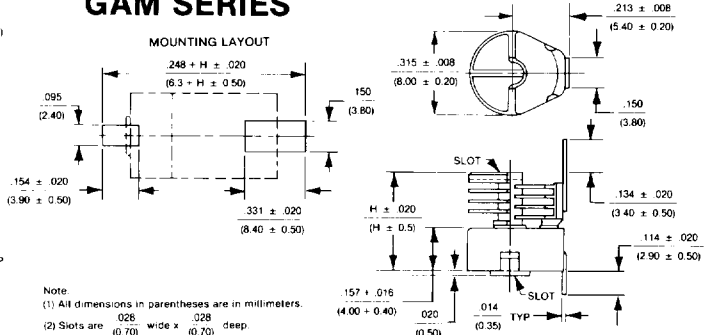
GAK SERIES



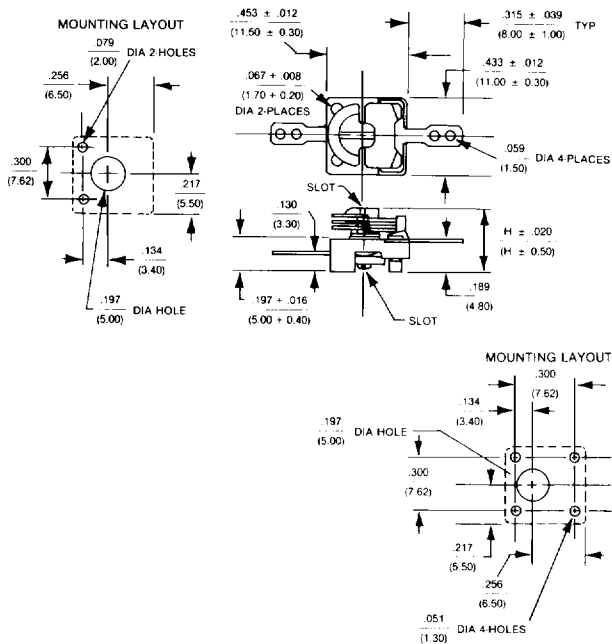
GAL SERIES



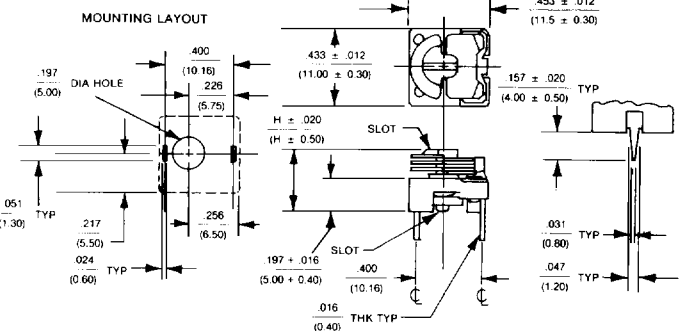
GAM SERIES



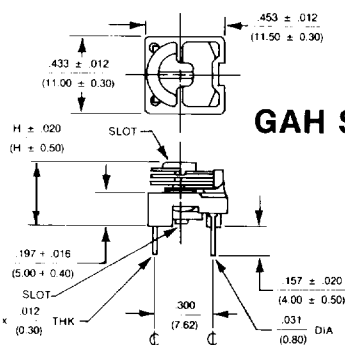
GAD SERIES



GAE SERIES



GAH SERIES

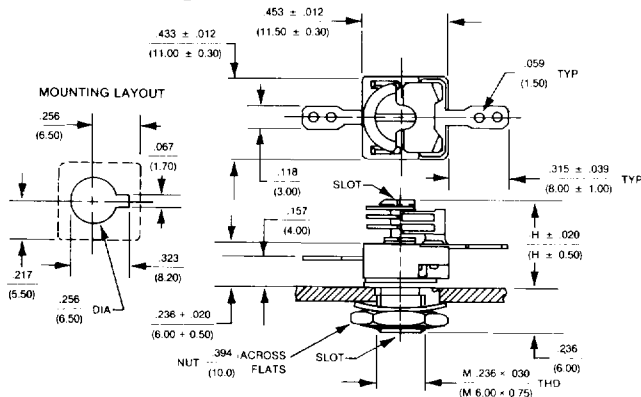


Note:

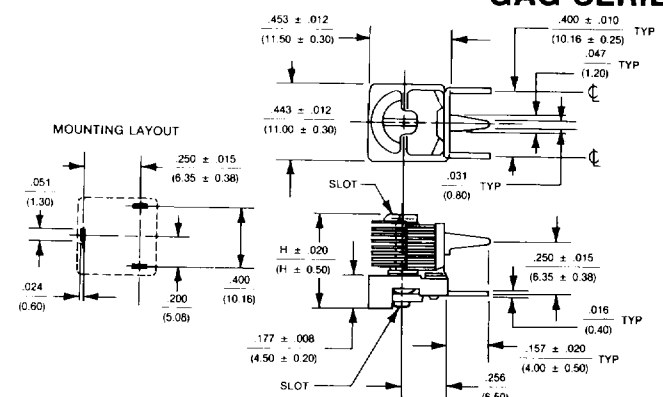
(1) All dimensions in parentheses are in millimeters.

(2) Slots are .026 (0.70) wide x .031 (0.80) deep.

GAF SERIES



GAG SERIES



ECONOMY LINE

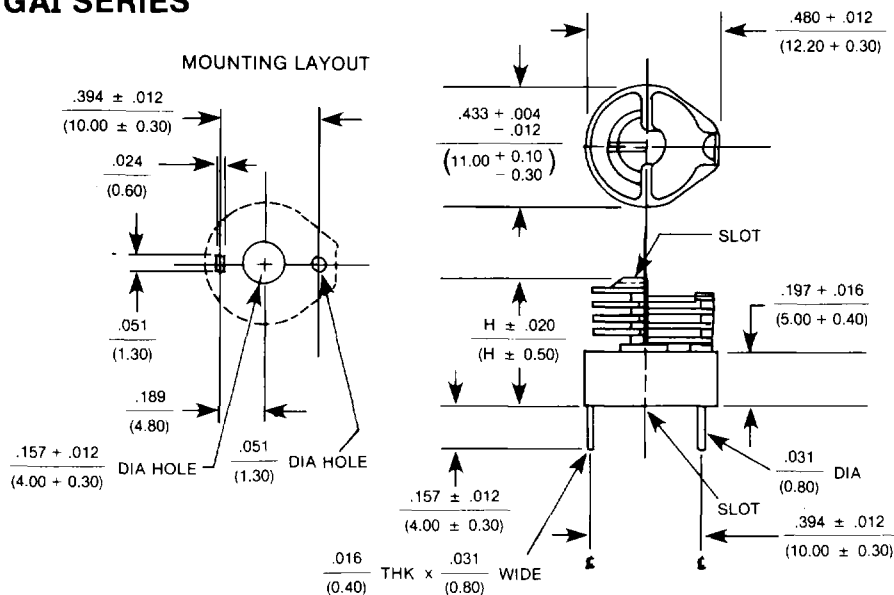
Specifications:

- **Operating temperature range:** -55°C to $+85^{\circ}\text{C}$
- **Test voltage:** 650 VDC
- **Working voltage:** 325 VDC
- **Insulation resistance:** $>25,000$ megohms
- **Adjust torque:** 2.5 to 6.0 oz.-in.
- **Temperature coefficient:** $+45 \pm 20$ PPM/ $^{\circ}\text{C}$, measured over temperature range of -30°C to $+80^{\circ}\text{C}$ at 1 MHz & 50% RH
- **Nominal air gap:** .010" (0.25 mm)

TABLE 5

GAI Series Model No.	CAP. RANGE (pF)		HEIGHT (H)	
	C (min.)	C (max.)	± .020 (in.)	± 0.5 (mm)
GAI4R000	1.2	4.0	.382	9.7
GAI6R000	1.3	6.0	.433	11.0
GAI8R000	1.5	8.0	.484	12.3
GAI11000	1.6	10.5	.535	13.6
GAI13000	1.7	12.5	.587	14.9
GAI15000	1.9	15.0	.638	16.2
GAI17000	2.0	17.0	.689	17.5
GAI19000	2.2	19.0	.740	18.8
GAI21000	2.3	21.0	.791	20.1

GAI SERIES



Note:

(1) All dimensions in parentheses are in millimeters.

(2) Slot is $\frac{.028}{(.070)}$ wide x $\frac{.028}{(.070)}$ deep.

Sprague-Goodman Electronics, Inc.

134 FULTON AVE., GARDEN CITY PARK, N.Y. 11040-5395
TEL: 516-746-1385 • Telex: 14-4533 • FAX: 516-746-1396