Series MAV

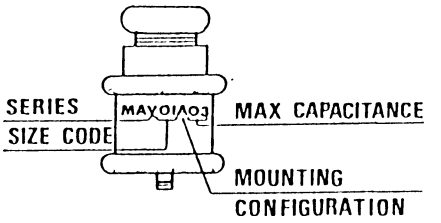
The MAV range of air dielectric trimmers are specifically designed for high frequency applications that demand extreme stability and a high 'Q' under severe environmental conditions in a small physical size. The internal shells are silver plated to provide optimum surface conductivity and long life. A guiding element maintains the rotor concentricity under extremes of shock and vibration, and a rubber gasketted threaded end cap provides seal against moisture and contaminants. All terminals are gold plated for optimum high frequency conductivity and dependable solderability. Solder coating on terminals is offered as an option. The "Top-Tuned" styles were developed to enable the more efficient use of mounting space in miniature U.H.F.circuits and are tuned at right angles to the mounting surface. In addition to the standard model special units can be manufactured which are designated with the prefix SAV. For further information contact our Technical Department.

General Electrical Data

- ❒ Meet or exceed all requirements of MIL-C-14409
- ❒ Insulation resistance at 25°C > 10^6 megohms.
- ❒ Capacitance range: 0.4 - 30pF at 1 MHz
- ❒ Operating temperature range: -55°C to 125°C.
- ❒ Typical contact resistance: < 6milliohms throughout capacitance range.
- ❒ Working Voltage: 250V d.c.
- ❒ Dielectric Test Voltage: 500V d.c.
- ❒ 'Q' Typically above 1,000 at 100 MHz and 25°C at Maximum Rated Capacitance
- ❒ UHF to Microwave Frequencies

Physical Specifications:

- ❒ Tuning Torque: 0.3 - 3.0 ounce - inch (2.1-21mN.m) for MAV 01 and 0.5 - 6.0 ounce - inch (3.5-42mN.m) for MAV 02 - MAV 05
- ❒ Body - Alumina.
- ❒ Terminal and leads - Brass, Gold plated.
- ❒ Unless otherwise specified, tolerances are:
  1. For dimensions ≤ .124 (3.15mm): ±. 005 (0.12 mm)
  2. For dimensions ≥ .125 (3.17mm): ±. 015 (0.4 mm)
- ❒ Adjustment: Use screwdriver tip: 015 inch (.38 mm) max. wide - .075 inch (1.9 mm) max. long.- only for MAV 01, for others use screw driver tip .017 inch (0.43mm) max. wide, .160 inch (4.0mm) max long.
- ❒ Panel Mount or Printed Circuit Mounting.



Standard marking & MAV Ordering Information

MAV Series

01 Size Code

01
02
03
04
05

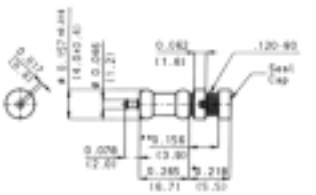
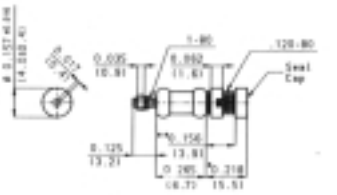
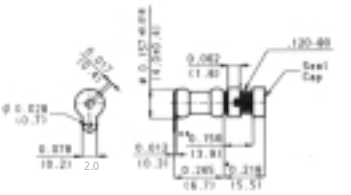
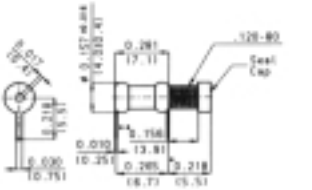
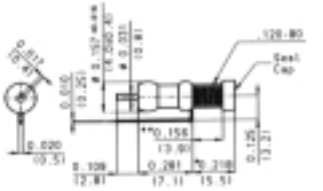
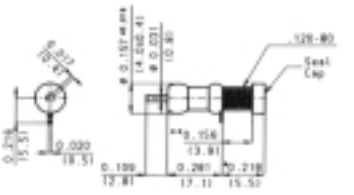
A Mounting configuration

- A- Panel Mount with Turret Terminal
- B- Panel Mount with Threaded Terminal
- C- Panel mount with lug terminal
- D- Printed circuit Horizontal Mounting
- E- Top Tuned
- F- 3 Pin Printed Circuit Mounting Top Tuned
- G- 2 Pin Printed Circuit Mounting Ribbon Lead Top Tuned
- H- 2 Pin Printed Circuit Mounting Ribbon Lead
- I- 3 Lead Printed Circuit Mounting Top Tuned
- K- 3 Pin Printed Circuit Mounting Ribbon Lead Top Tuned
- L- 3 Pin Printed Circuit Mounting Ribbon Lead Top Tuned
- N- 2 Pin Printed Cirult Mounting Top Tuned
- P- Printed Circuit Mounting With Horizontal Lead

03 Maximum Capacitance in pF. (to the nearest digit)

SC Slotted cap
Note: Allow an increase In overall length of 0.028 Inches (0.7 mm).

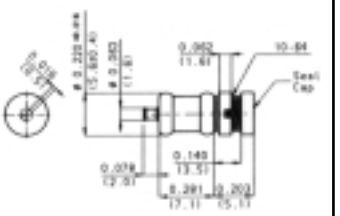
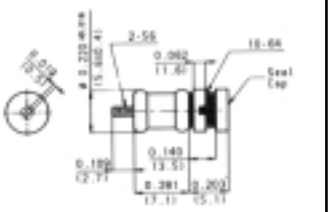
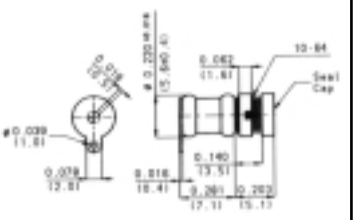
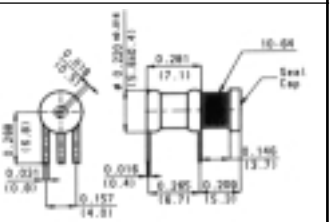
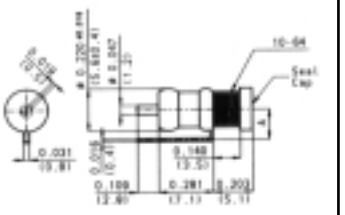
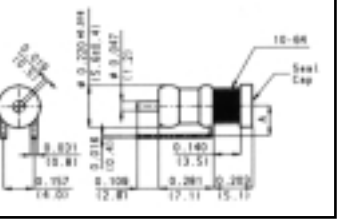
Series MAV 01

Model	Capacitance Range (pF)	Q at 100 MHz	T.C. (PPM/°C)	Outline and dimensions	
MAV01A03 MAV01A05	0.4-3.5 0.5-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		
MAV01B03 MAV01B05	0.4-3.5 0.5-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		
MAV01C03 MAV01C05	0.4-3.5 0.5-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		
MAV01D03 MAV01D05	0.4-3.5 0.5-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		
MAV01E03 MAV01E05	0.5-3.5 0.6-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		
MAV01P03 MAV01P05	0.4-3.5 0.5-5.0	> 10,000 > 7,500	0 ± 15 0 ± 50		

NOTE: All dimensions are in Inches (mm).

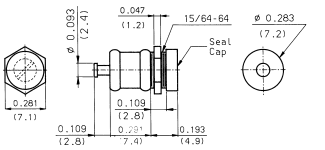
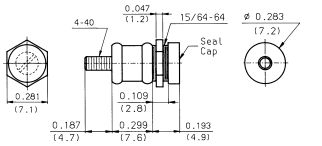
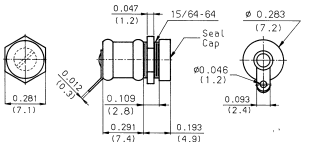
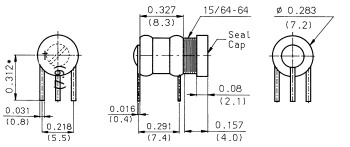
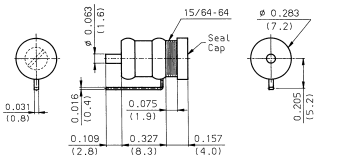
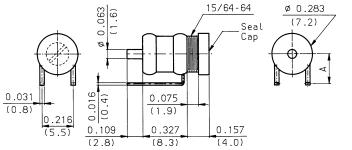
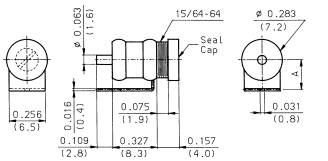
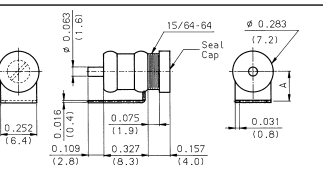
05 Version** 165 (4.2mm)* .224 (5.8mm)

Series MAV 02

Model	Capacitance Range (pF)	Q at 100 MHz	T.C. (PPM/°C)		Outline and dimensions
MAV02A06 MAV02A08 MAV02A10	0.6-6.0 0.6-8.0 0.8-10	> 10,000 > 5,000 > 7,500	0 ± 15 0 ± 50 0 ± 50		
MAV02B06 MAV02B08 MAV02B10	0.6-6.0 0.6-8.0 0.8-10	> 10,000 > 5,000 > 7,500	0 ± 15 0 ± 50 0 ± 50		
MAV02C06 MAV02C08 MAV02C10	0.6-6.0 0.6-8.0 0.8-10	> 10,000 > 5,000 > 7,500	0 ± 15 0 ± 50 0 ± 50		
MAV02D06 MAV02D08 MAV02D10	0.6-6.0 0.6-8.0 0.8-10	> 10,000 > 5,000 > 7,500	0 ± 15 0 ± 50 0 ± 50		
MAV02E06 MAV02N06 MAV02E08 MAV02E10	0.7-6.0 0.7-6.0 0.7-8.0 1.0-10	> 10,000 > 10,000 > 5,000 > 7,500	0 ± 15 0 ± 15 0 ± 50 0 ± 50	DIM A .157 (4.0) .205 (5.2) .157 (4.0) .157 (4.0)	
MAV02F06 MAV02F08 MAV02F10 MAV02I 10	0.7-6.0 0.7-8.0 1.0-10 1.0-10	> 10,000 > 5,000 > 7,500 > 7,500	0 ± 15 0 ± 50 0 ± 50 0 ± 50	DIM A .157 (4.0) .157 (4.0) .157 (4.0) .205 (5.2)	

NOTE: All dimensions are in Inches (mm).

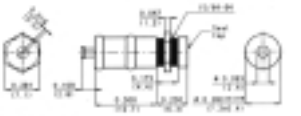
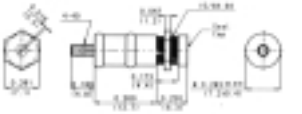
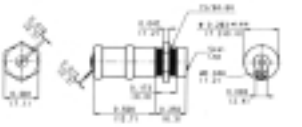
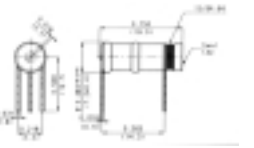
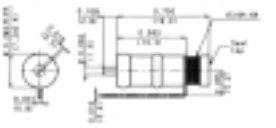
Series MAV 03

Model	Capacitance Range (pF)	Q at 100 MHz	T.C. (PPM/°C)		Outline and dimensions
MAV03A10 MAV03A14 MAV03A16	0.8-10 1.0-14 1.0-16	> 5,000 > 3,000 > 3,000	0 ± 15 0 ± 30 0 ± 30		 
MAV03B10 MAV03B14 MAV03B16	0.8-10 1.0-14 1.0-16	> 5,000 > 3,000 > 3,000	0 ± 15 0 ± 30 0 ± 30		 
MAV03C10 MAV03C14 MAV03C16	0.8-10 1.0-14 1.0-16	> 5,000 > 3,000 > 3,000	0 ± 15 0 ± 30 0 ± 30		 
MAV03D10 †MAV03D14 †MAV03D16	0.8-10 1.0-14 1.0-16	> 5,000 > 3,000 > 3,000	0 ± 15 0 ± 30 0 ± 30		 
MAV03E10 MAV03E14 MAV03E16	1.0-10 1.5-14 1.5-16	> 5,000 > 3,000 > 3,000	0 ± 15 0 ± 30 0 ± 30		 
MAV03I 10 MAV03F10 MAV03F14 MAV03I 14 MAV03F16	1.0-10 1.0-10 1.5-14 1.5-14 1.5-16	> 5,000 > 3,000 > 3,000 > 3,000 > 3,000	0 ± 15 0 ± 15 0 ± 30 0 ± 30 0 ± 30	DIM A .205 (5.2) .283 (7.2) .283 (7.2) .205 (5.2) .283 (7.2)	 
MAV03H10 MAV03G10 MAV03G14 MAV03G16	1.0-10 1.0-10 1.5-14 1.5-16	> 5,000 > 3,000 > 3,000 > 3,000	0 ± 15 0 ± 15 0 ± 30 0 ± 30	DIM A .205 (5.2) .283 (7.2) .283 (7.2) .283 (7.2)	 
MAV03L10 MAV03K10 MAV03K14 MAV03K16	1.0-10 1.0-10 1.5-14 1.5-16	> 5,000 > 3,000 > 3,000 > 3,000	0 ± 15 0 ± 15 0 ± 30 0 ± 30	DIM A .205 (5.2) .283 (7.2) .283 (7.2) .283 (7.2)	 

† D14 & D16 versions .500 (12.7)

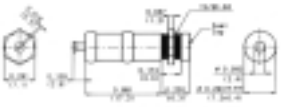
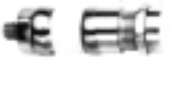
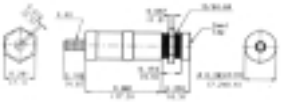
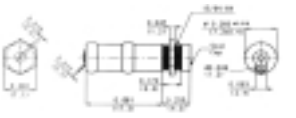
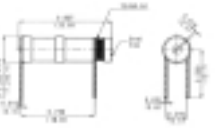
NOTE: All dimensions are in inches (mm).

Series MAV 04

Mode	Capacitance Range (pF)	Q at 100 MHz	T.C. (PPM/°C)	Outline and dimensions	
† MAV04A10 MAV04A20 MAV04A25	1.0-10 1.0-20 1.5-25	> 2,000 > 1,500 > 1,200	0 ± 30 0 ± 30 0 ± 30		
† MAV04B10 MAV04B20 MAV04B25	1.0-10 1.0-20 1.5-25	> 2,000 > 1,500 > 1,200	0 ± 30 0 ± 30 0 ± 30		
† MAV04C10 MAV04C20 MAV04C25	1.0-10 1.0-20 1.5-25	> 2,000 > 1,500 > 1,200	0 ± 30 0 ± 30 0 ± 30		
† MAV04D10 MAV04D20 MAV04D25	1.0-10 1.0-20 1.5-25	> 2,000 > 1,500 > 1,200	0 ± 30 0 ± 30 0 ± 30		
† MAV04E10 MAV04E20 MAV04E25	1.0-10 1.5-20 1.5-25	> 2,000 > 1,500 > 1,200	0 ± 30 0 ± 30 0 ± 30		

† High Voltage Model. WVd.c.500V, Dielectric Test Voltage 1000V.

Series MAV 05

Mode	Capacitance Range (pF)	Q at 100 MHz	T.C. (PPM/°C)	Outline and dimensions	
MAV05A30	1.0-30	> 800	0 ± 30		
MAV05B30	1.0-30	> 800	0 ± 30		
MAV05C30	1.0-30	> 800	0 ± 30		
MAV05D30	1.0-30	> 800	0 ± 30		

NOTE: All dimensions are in inches (mm).