

AVIONICS MOUNTS **Low Profile, All-Axis Vibration Isolators**

Avionics mounts are compact, lightweight vibration isolators that provide excellent vibration protection in all axes. Specially designed for the aviation industry, avionics mounts are ideally suited to mounting sensitive electronics in challenging dynamic applications. They are available in a wide variety of spring rates to produce natural frequencies of 20-40 Hz to accommodate many dynamic environments.

Avionics mounts are constructed using a silicone elastomer blend appropriate for operating temperatures of -65 to +300 °F. The silicone elastomer blend used produces excellent damping characteristics resulting in a maximum amplification at resonance of 4.0 for all sizes under typical environmental conditions. They are rugged and are capable of withstanding 15G 11 ms half-sine shock inputs without damage and are available in 6 sizes with load ratings from 4 to 20 lbs.

Features:

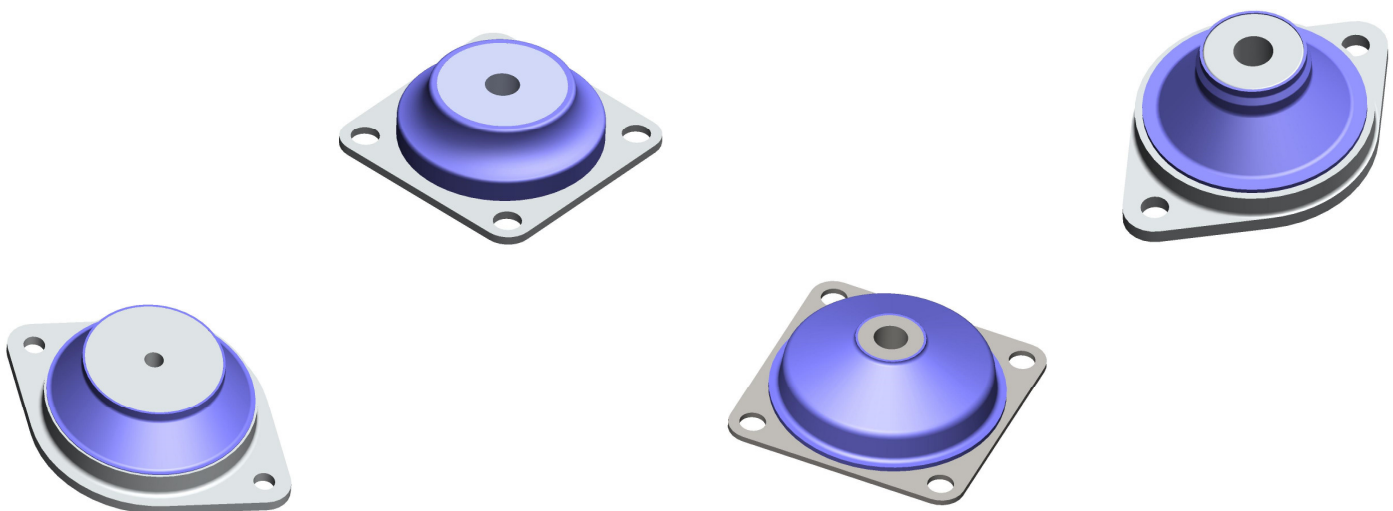
- Lightweight, low-profile design
- Efficiently isolates vibration in all directions
- 1:1 Axial to Radial spring rate

Avionics mounts are available in six sizes:

- VIB3124: load rating = 4.0 lb
- VIB3127: load rating = 4.5 lb
- VIB3126: load rating = 6.0 lb
- VIB3125: load rating = 10.0 lb
- VIB3128: load rating = 15.0 lb
- VIB3129: load rating = 20.0 lb

Applicable Military Specifications:

- MIL-STD-810



AVIONICS MOUNTS VIB3122 SERIES

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F (silicone)

Maximum Transmissibility at Resonance: 4.0

Load Capacity: 3.5 lb

Axial-Radial Stiffness Ratio: 1:1

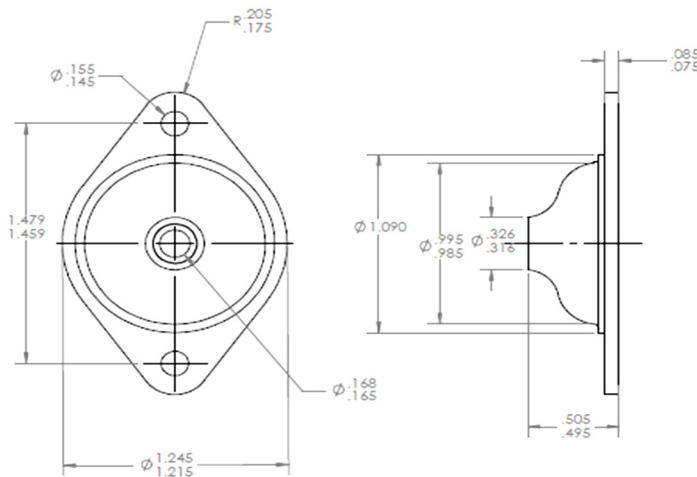
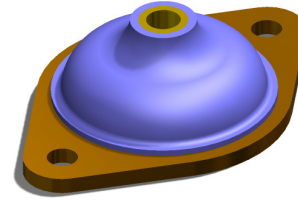
Part Weight: 0.27 oz.

Materials & Finish:

Metal components: AL alloy, Conversion coated per

MIL-C-5541 class 1A

Elastomer: Silicone



Performance Characteristics

Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Hz	lb/in	N/mm	lb/in	N/mm
VIB3122-2	14	71	12	71	12
VIB3122-3	15	84	15	84	15
VIB3122-4	17	98	17	98	17
VIB3122-5	18	114	20	114	20
VIB3122-6	19	131	23	131	23
VIB3122-7	20	150	26	150	26
VIB3122-8	22	173	30	173	30
VIB3122-9	23	197	35	197	35
VIB3122-10	25	226	40	226	40

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:

$$F_n = F_{nn} \sqrt{P_r / P_a}$$

Where:

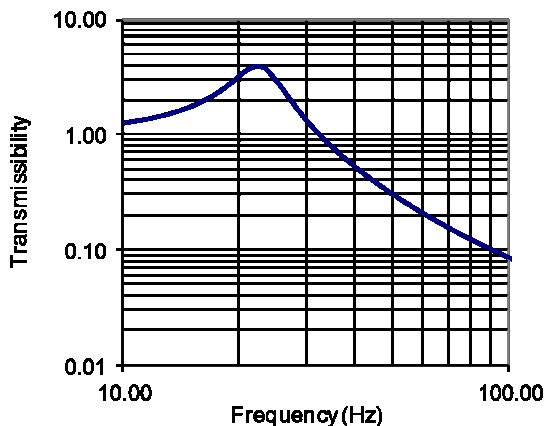
F_n : Natural Frequency at actual load (Hz)

F_{nn} : Nominal Natural Frequency (Hz)

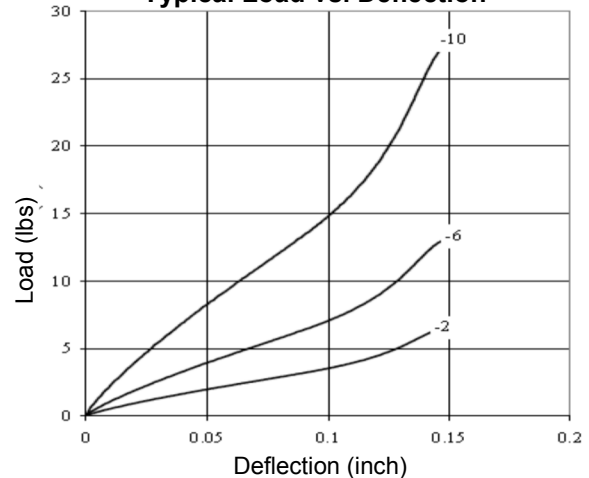
P_r : Rated load

P_a : Actual load

Transmissibility vs. Frequency



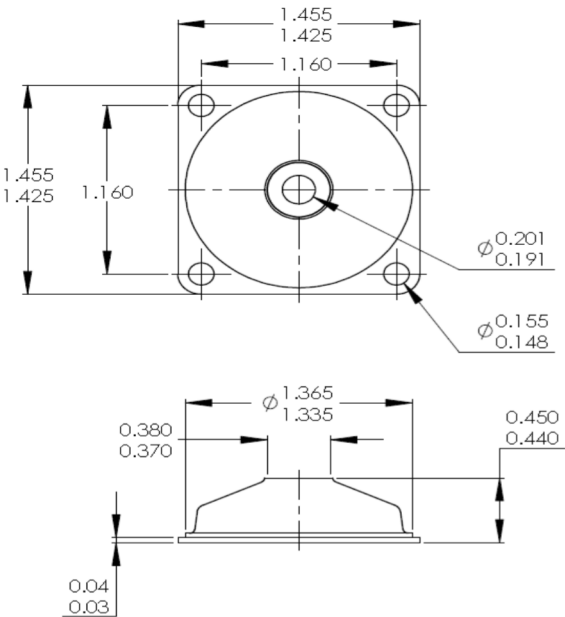
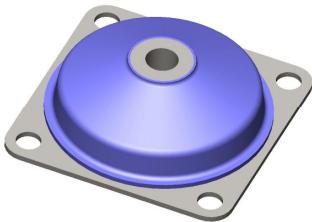
Typical Load vs. Deflection



AVIONICS MOUNTS VIB3124 SERIES

PRODUCT SPECIFICATIONS

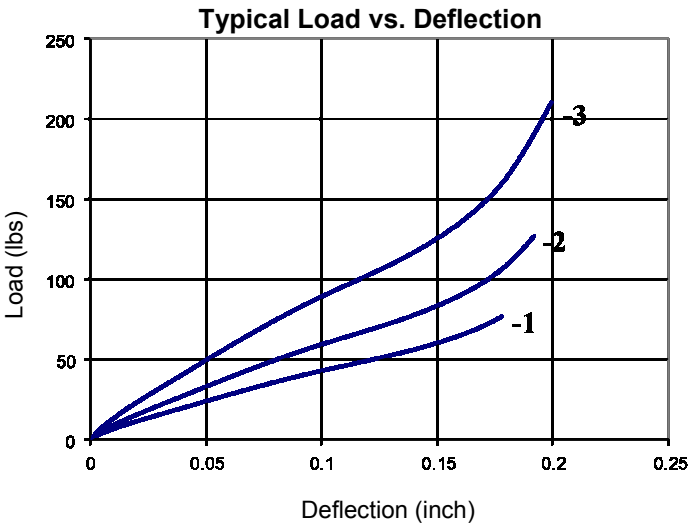
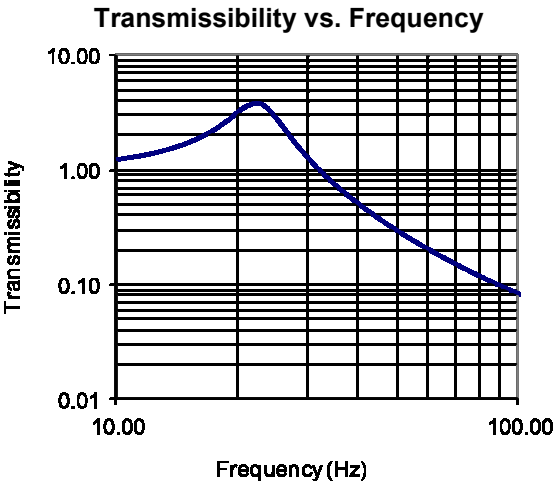
Operating Temperature: -65 to +300 F (silicone)
Maximum Transmissibility at Resonance: 4.0
Load Capacity: 4.0 lb
Axial-Radial Stiffness Ratio: 1:1
Part Weight: 0.46 oz.
Materials & Finish:
Core: 300 series CRES, Passivated per ASTM A967
Plate: 300 series CRES, Passivated per ASTM A967
Elastomer: Silicone



Performance Characteristics

Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
		Hz	lb/in N/mm	lb/in N/mm	
VIB3124-2	13	71	12	79	14
VIB3124-3	14	84	15	93	16
VIB3124-4	15	98	17	109	19
VIB3124-5	17	114	20	127	22
VIB3124-6	18	131	23	146	25
VIB3124-7	19	150	26	167	29
VIB3124-8	21	173	30	192	34
VIB3124-9	22	197	35	219	38
VIB3124-10	23	226	40	251	44

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
 $F_n = F_{nn} \sqrt{P_r / P_a}$
Where:
Fn: Natural Frequency at actual load (Hz)
Fnn: Nominal Natural Frequency (Hz)
Pr: Rated load
Pa: Actual load



AVIONICS MOUNTS VIB3125 SERIES

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F (silicone)

Maximum Transmissibility at Resonance: 4.0

Load Capacity: 10.0 lb

Axial-Radial Stiffness Ratio: 1:1

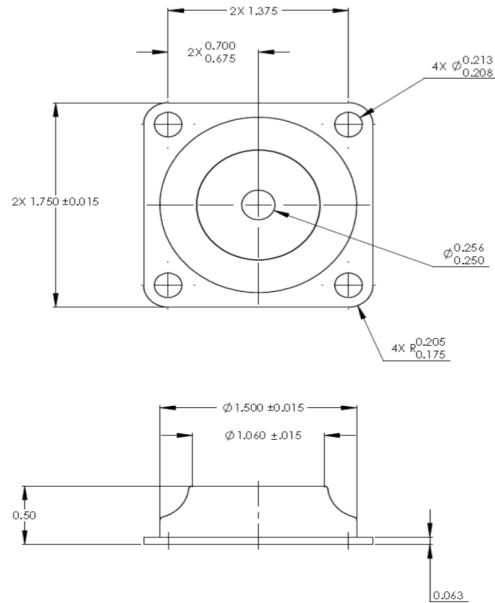
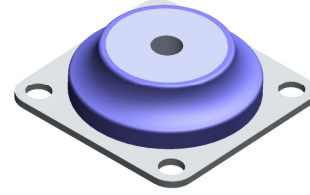
Part Weight: 0.82 oz.

Materials & Finish:

Core: Al 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Plate: AL 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Elastomer: Silicone



Performance Characteristics

Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
		Hz	lb/in N/mm	lb/in N/mm	
VIB3125-7	24	581	102	528	93
VIB3125-8	26	681	119	619	108
VIB3125-9	28	738	131	725	127
VIB3125-10	30	932	163	847	148
VIB3125-11	32	1065	187	965	170
VIB3125-12	35	1221	214	1110	194
VIB3125-13	37	1405	248	1277	224
VIB3125-14	40	1611	282	1465	256
VIB3125-15	43	1844	323	1676	294

*F_n at max rated load and .036 inch DA input
To correct for loads lower than rated load use:

$$F_n = F_{nn} \sqrt{P_r / P_a}$$

Where:

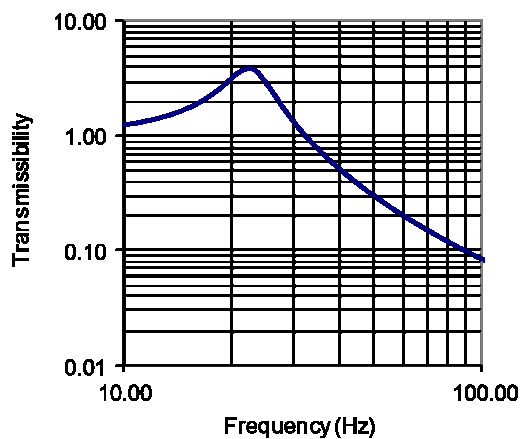
F_n: Natural Frequency at actual load (Hz)

F_{nn}: Nominal Natural Frequency (Hz)

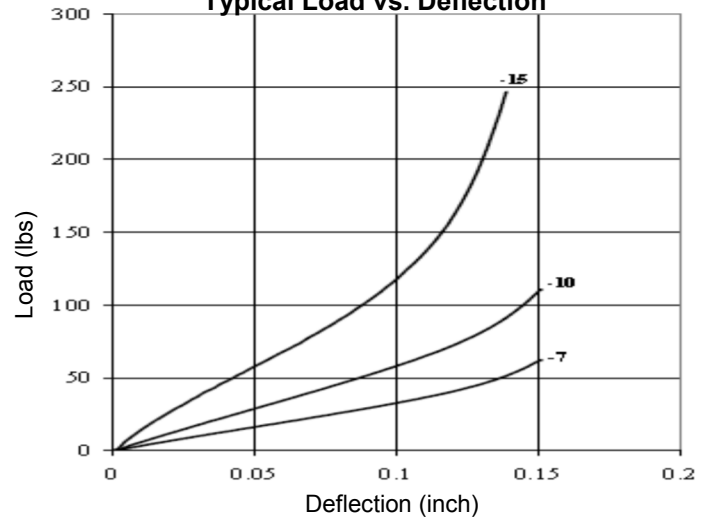
P_r: Rated load

P_a: Actual load

Transmissibility vs. Frequency



Typical Load vs. Deflection



AVIONICS MOUNTS VIB3126 SERIES

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F (silicone)

Maximum Transmissibility at Resonance: 4.0

Load Capacity: 6.0 lb

Axial-Radial Stiffness Ratio: 1:1

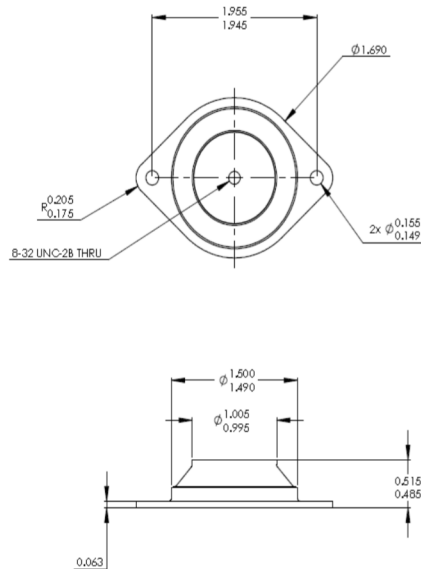
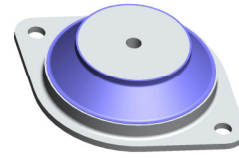
Part Weight: 0.67 oz.

Materials & Finish:

Core: Al 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Plate: AL 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Elastomer: Silicone

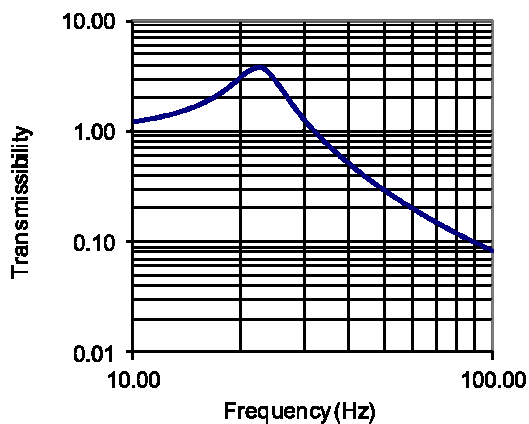


Performance Characteristics

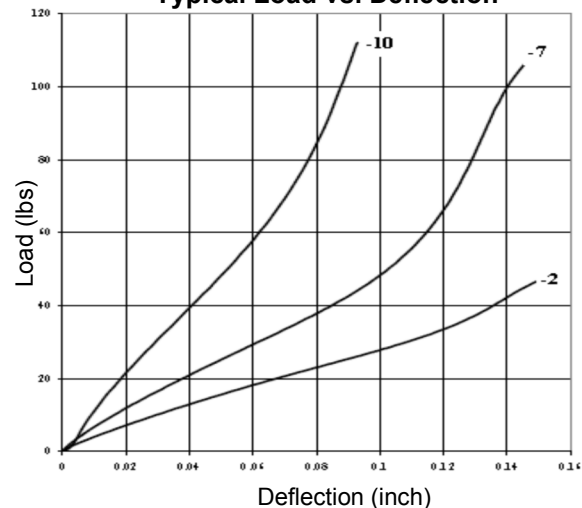
Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Hz	lb/in	N/mm	lb/in	N/mm
VIB3126-2	24	353	62	272	48
VIB3126-3	26	414	73	318	56
VIB3126-4	28	485	85	373	65
VIB3126-5	31	566	99	436	76
VIB3126-6	33	647	113	498	87
VIB3126-7	35	743	130	572	100
VIB3126-8	37	854	150	657	115
VIB3126-9	40	979	171	753	132
VIB3126-10	43	1121	196	862	151

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
 $F_n = F_{nn} \cdot \sqrt{P_r / P_a}$
Where:
F_n: Natural Frequency at actual load (Hz)
F_{nn}: Nominal Natural Frequency (Hz)
P_r: Rated load
P_a: Actual load

Transmissibility vs. Frequency



Typical Load vs. Deflection



AVIONICS MOUNTS VIB3127 SERIES

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F (silicone)

Maximum Transmissibility at Resonance: 4.0

Load Capacity: 4.5 lb

Axial-Radial Stiffness Ratio: 1:1

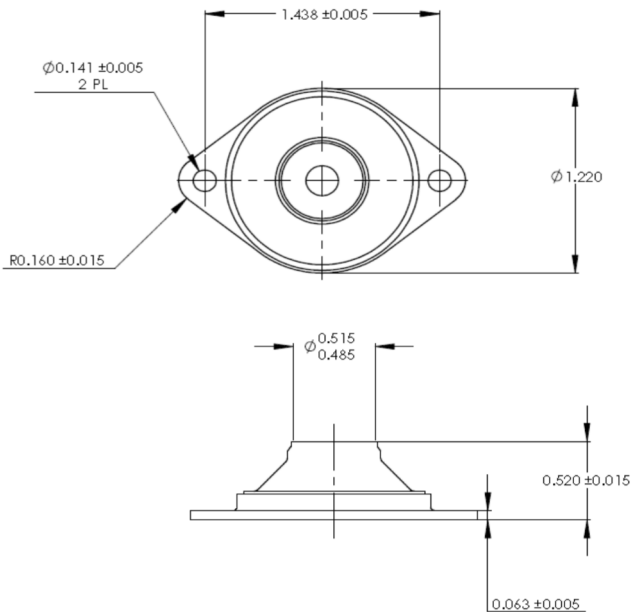
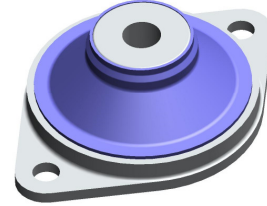
Part Weight: 0.34 oz.

Materials & Finish:

Core: Al 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Plate: AL 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A

Elastomer: Silicone



Performance Characteristics

Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Hz	lb/in	N/mm	lb/in	N/mm
VIB3127-2	18	152	27	168	30
VIB3127-3	20	178	31	198	35
VIB3127-4	21	209	37	232	41
VIB3127-5	23	244	43	271	47
VIB3127-6	25	278	49	309	54
VIB3127-7	26	319	56	354	62
VIB3127-8	28	367	64	408	71
VIB3127-9	30	421	74	468	82
VIB3127-10	33	482	84	536	94

*F_n at max rated load and .036 inch DA input
To correct for loads lower than rated load use:

$$F_n = F_{nn} \cdot \sqrt{P_r / P_a}$$

Where:

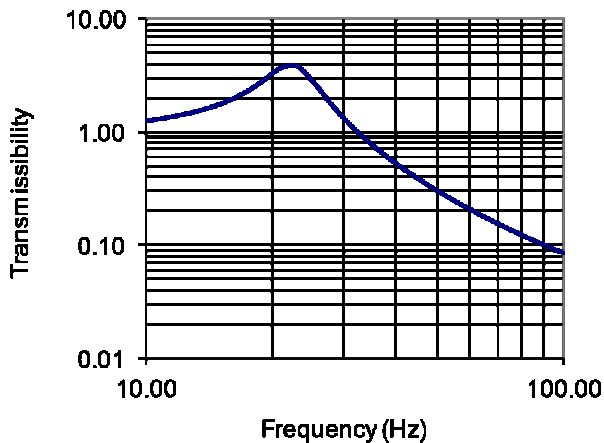
F_n: Natural Frequency at actual load (Hz)

F_{nn}: Nominal Natural Frequency (Hz)

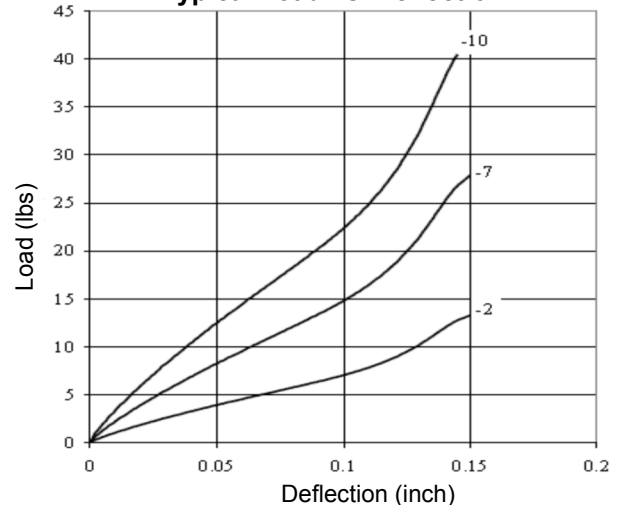
P_r: Rated load

P_a: Actual load

Transmissibility vs. Frequency



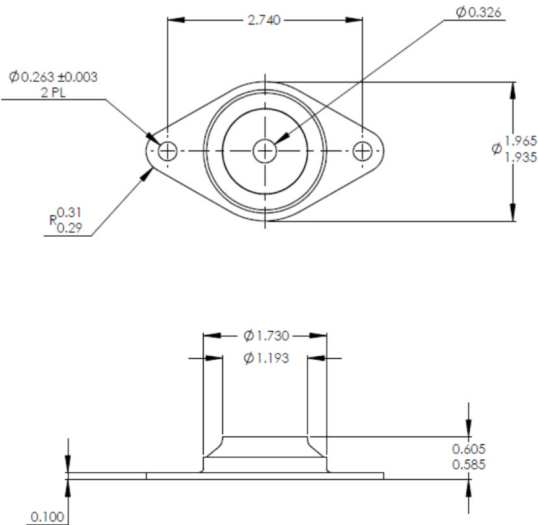
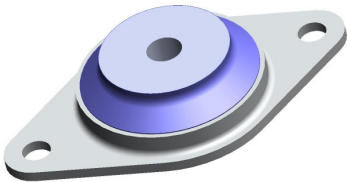
Typical Load vs. Deflection



AVIONICS MOUNTS VIB3128 SERIES

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F (silicone)
Maximum Transmissibility at Resonance: 4.0
Load Capacity: 15 lb
Axial-Radial Stiffness Ratio: 1:1
Part Weight: 1.60 oz.
Materials & Finish:
Core: Al 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A
Plate: AL 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A
Elastomer: Silicone

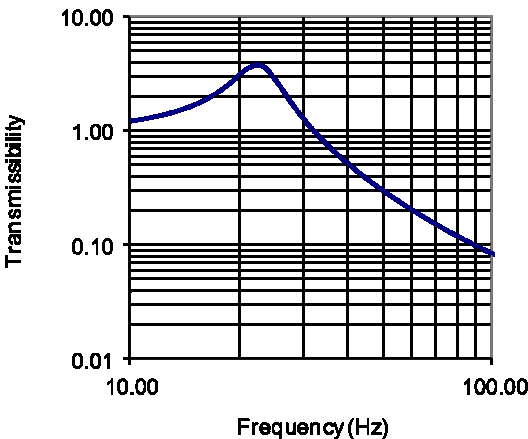


Performance Characteristics

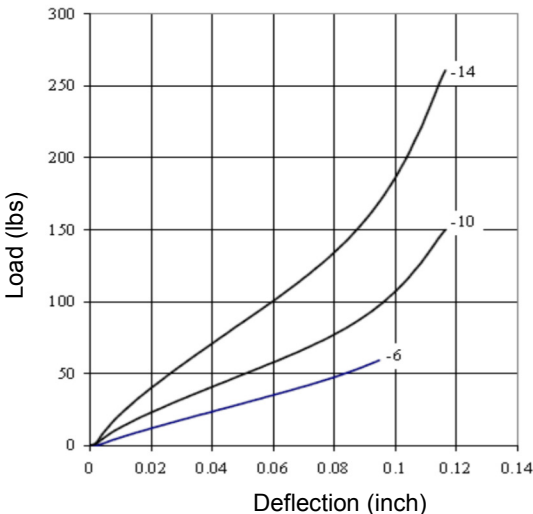
Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Hz	lb/in	N/mm	lb/in	N/mm
VIB3128-6	23	830	145	830	145
VIB3128-7	26	1000	175	1000	175
VIB3128-8	28	1170	205	1170	205
VIB3128-9	30	1360	239	1360	239
VIB3128-10	32	1610	282	1610	282
VIB3128-11	35	1870	328	1870	328
VIB3128-12	37	2130	374	2130	374
VIB3128-13	40	2430	426	2430	426
VIB3128-14	43	2800	491	2800	491

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
 $F_n = F_{nn} \cdot \sqrt{P_r / P_a}$
Where:
Fn: Natural Frequency at actual load (Hz)
Fnn: Nominal Natural Frequency (Hz)
Pr: Rated load
Pa: Actual load

Transmissibility vs. Frequency



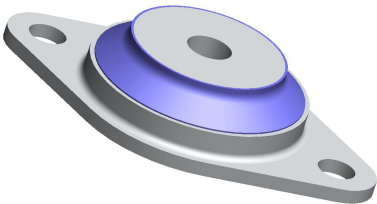
Typical Load vs. Deflection



AVIONICS MOUNTS VIB3129 SERIES

PRODUCT SPECIFICATIONS

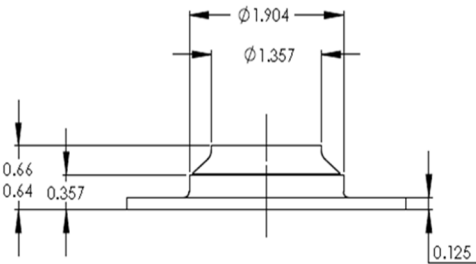
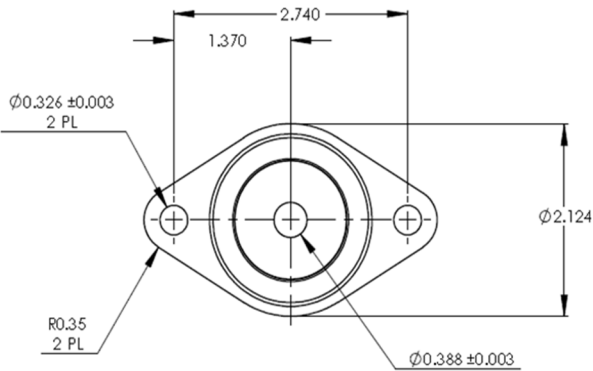
Operating Temperature: -65 to +300 F (silicone)
Maximum Transmissibility at Resonance: 4.0
Load Capacity: 20 lb
Axial-Radial Stiffness Ratio: 1:1
Part Weight: 2.08 oz.
Materials & Finish:
Core: Al 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A
Plate: AL 6061-T6 or T651 per QQ-A-250/11 or QQ-A-225/6, Alodine 1200 per MIL-C-5541 Class 1A
Elastomer: Silicone



Performance Characteristics

Part No.	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Hz	lb/in	N/mm	lb/in	N/mm
VIB3129-6	23	1100	193	1100	193
VIB3129-7	26	1330	233	1330	233
VIB3129-8	28	1560	274	1560	274
VIB3129-9	30	1810	318	1810	318
VIB3129-10	32	2150	377	2150	377
VIB3129-11	35	2490	437	2490	437
VIB3129-12	37	2840	497	2840	497
VIB3129-13	40	3240	567	3240	567
VIB3129-14	43	3700	648	3700	648

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
 $F_n = F_{nn} \cdot \sqrt{P_r / P_a}$
Where:
Fn: Natural Frequency at actual load (Hz)
Fnn: Nominal Natural Frequency (Hz)
Pr: Rated load
Pa: Actual load



Transmissibility vs. Frequency

