

## 106 SERIES, 156 SERIES



### *ECONOMICAL PROTECTION FROM LOWER FREQUENCY VIBRATION*

Standard stock Multiplane Mounts are recommended for the isolation of vibration. Lightweight and compact, they provide economical protection from lower frequency disturbances regardless of directions of the forces. They are not recommended where severe, frequently recurring shock is encountered.

These mounts are available in load ratings from 0.25 to 8 pounds per unit. When loaded to their capacity, a system natural frequency of approximately 10 Hz results, providing effective isolation in applications where disturbing frequencies are above 20 Hz. The radial stiffness is the same as that in the axial direction.

Multiplane Mounts are easy to install. They are available in square or diamond configurations to suit a variety of design requirements.

The contour of the flexing element provides uniform stress distribution.

Snubbing washers provide an interlocking system of metal parts which act to prevent damage from overload or excessive shock impact.

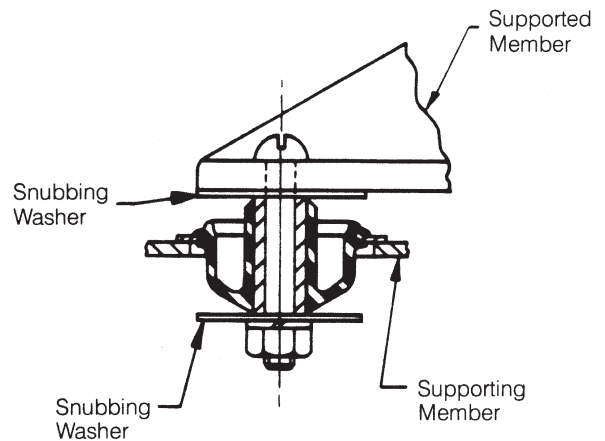
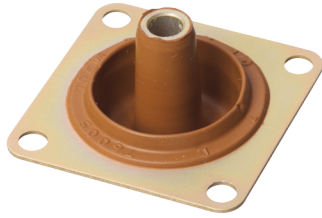


FIGURE 1 – TYPICAL INSTALLATION

# MULTIPLANE MOUNTS

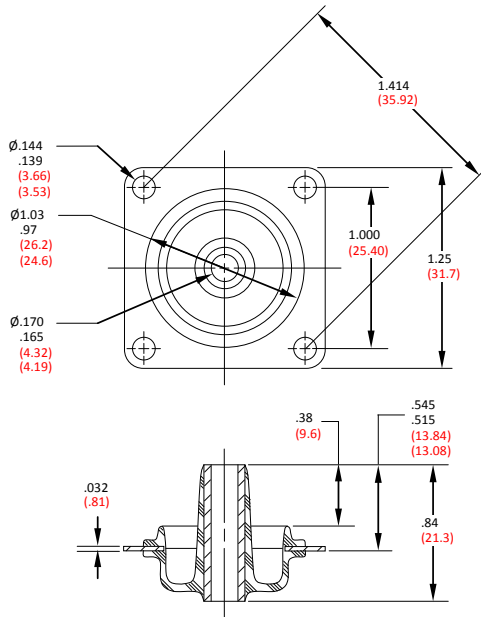
## 106APL SERIES



- **Load capacity:**  
0.25 to 2 lb (0.10 to 0.90 kg)

- **Materials:**  
Metal parts and finish – aluminum alloy, chromate treated per MIL-DTL-5541, Class 1A  
Inner member – 2024-T4 aluminum  
Outer member – 2024-T3 or 2024-T4 aluminum  
Elastomer – LORD BTR® or BTR® II Silicone

FIGURE 1 – PART DIMENSIONS



Metric values in parenthesis.

TABLE 1 – PERFORMANCE CHARACTERISTICS

Part Number	Static Load		Nominal Axial Natural Freq' (Hz)	Dynamic Axial Spring Rate <sup>1</sup>	
	lb	kg		lb/in	N/mm
106APL*-A	¼	0.11	18	8	1.4
106APL*-B	½	0.23	18	17	3.0
106APL*-C	¾	0.34	16	20	3.4
106APL*-1	1	0.45	16	26	4.6
106APL*-1B	1½	0.68	14	30	5.3
106APL*-2	2	0.91	14	40	7.0

\* When ordering, use the following in place of the (\*):

Q = BTR II elastomer

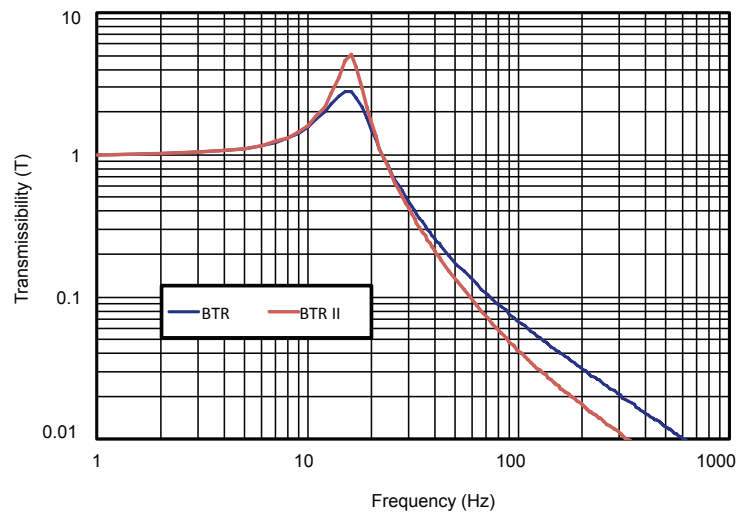
W = BTR elastomer

<sup>1</sup> At 0.036 in (0.91 mm) D.A. input and rated load.

TABLE 2 – SNUBBING WASHER DIMENSIONS

Part Number J-2049-1D	Outside Diameter	Inside Diameter	Thickness
in	0.88	0.17	0.03
mm	22.3	4.3	0.8

FIGURE 2 – TRANSMISSIBILITY VS. FREQUENCY



# MULTIPLANE MOUNTS

## 106APDL SERIES



- **Load capacity:**  
0.25 to 2 lb (0.10 to 0.90 kg)

- **Materials:**

Metal parts and finish – aluminum alloy, chromate treated per MIL-DTL-5541, Class 1A

Inner member – 2024-T4 aluminum

Outer member – 2024-T3 or 2024-T4 aluminum

Elastomer – LORD BTR® or BTR® II Silicone

**TABLE 1 – PERFORMANCE CHARACTERISTICS**

Part Number	Static Load		Nominal Axial Natural Freq <sup>†</sup> (Hz)	Dynamic Axial Spring Rate <sup>†</sup>	
	lb	kg		lb/in	N/mm
106APDL*-A	¼	0.11	18	8	1.4
106APDL*-B	½	0.23	18	17	3.0
106APDL*-C	¾	0.34	16	20	3.4
106APDL*-1	1	0.45	16	26	4.6
106APDL*-1B	1½	0.68	14	30	5.3
106APDL*-2	2	0.91	14	40	7.0

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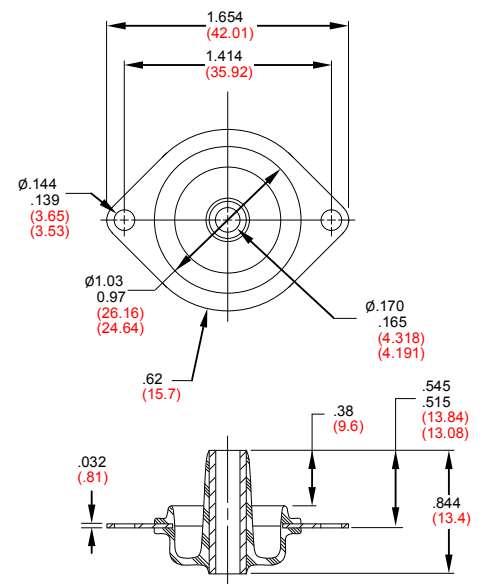
W = BTR elastomer

† At 0.036 in (0.91 mm) D.A. input and rated load.

**TABLE 2 – SNUBBING WASHER DIMENSIONS**

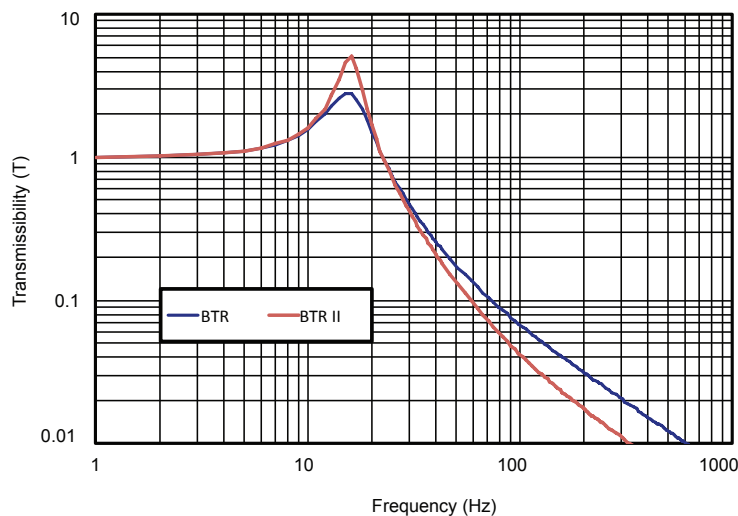
Part Number	Outside Diameter	Inside Diameter	Thickness
J-2049-1D			
in	0.88	0.17	0.03
mm	22.3	4.3	0.8

**FIGURE 1 – PART DIMENSIONS**



Metric values in parenthesis.

**FIGURE 2 – TRANSMISSIBILITY VS. FREQUENCY**



# MULTIPLANE MOUNTS

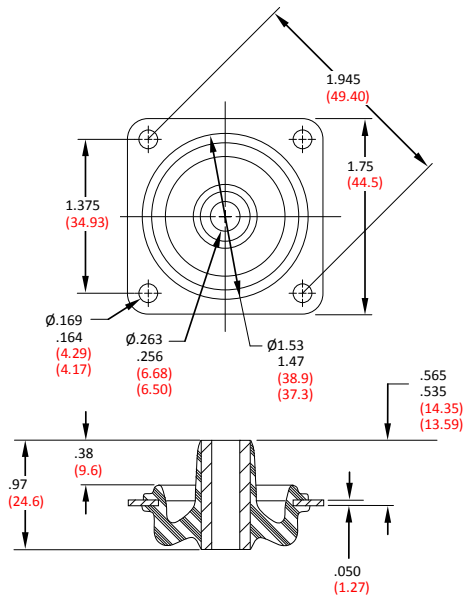
## 156APL SERIES



- **Load capacity:**  
3 to 8 lb (1.4 to 3.6 kg)

- **Materials:**  
Metal parts and finish – aluminum alloy, chromate treated per MIL-DTL-5541, Class 1A  
Inner member – 2024-T4 aluminum  
Outer member – 2024-T3 or 2024-T4 aluminum  
Elastomer – LORD BTR® or BTR® II Silicone

FIGURE 1 – PART DIMENSIONS



Metric values in parenthesis.

TABLE 1 – PERFORMANCE CHARACTERISTICS

Part Number	Static Load		Nominal Axial Natural Freq <sup>†</sup> (Hz)	Dynamic Axial Spring Rate <sup>†</sup>	
	lb	kg		lb/in	N/mm
156APL <sup>*</sup> -3	3	1.40	10	30	5.2
156APL <sup>*</sup> -4B	4.5	2.00	10	45	7.8
156APL <sup>*</sup> -6B	6.5	2.95	10	65	11
156APL <sup>*</sup> -8	8	3.60	10	80	14

\*When ordering, use the following in place of the (\*):

Q = BTR II elastomer

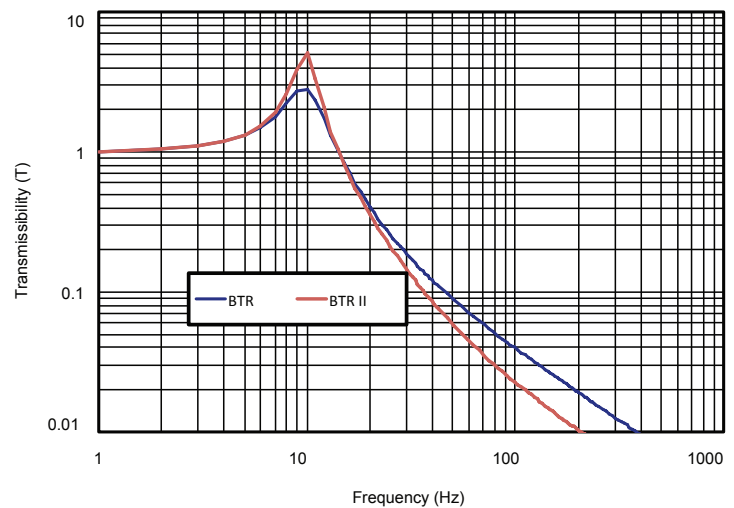
W = BTR elastomer

† At 0.036 in (0.91 mm) D.A. input and rated load.

TABLE 2 – SNUBBING WASHER DIMENSIONS

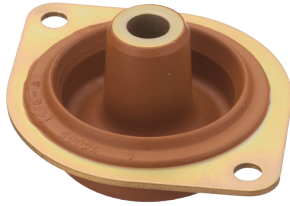
Part Number	Outside Diameter	Inside Diameter	Thickness
J-2049-1D			
in	1.38	0.26	0.05
mm	35.0	6.6	1.3

FIGURE 2 – TRANSMISSIBILITY VS. FREQUENCY



# MULTIPLANE MOUNTS

## 156APDL SERIES



- **Load capacity:**  
3 to 8 lb (1.4 to 3.6 kg)

- **Materials:**  
Metal parts and finish – aluminum alloy, chromate treated per MIL-DTL-5541, Class 1A  
Inner member – 2024-T4 aluminum  
Outer member – 2024-T3 or 2024-T4 aluminum  
Elastomer – LORD BTR® or BTR® II Silicone

**TABLE 1 – PERFORMANCE CHARACTERISTICS**

Part Number	Static Load		Nominal Axial Natural Freq <sup>†</sup> (Hz)	Dynamic Axial Spring Rate <sup>†</sup>	
	lb	kg		lb/in	N/mm
156APL*-3	3	1.40	10	30	5.2
156APL*-4B	4.5	2.00	10	45	7.8
156APL*-6B	6.5	2.95	10	65	11
156APL*-8	8	3.60	10	80	14

\*When ordering, use the following in place of the (\*):

Q = BTR II elastomer

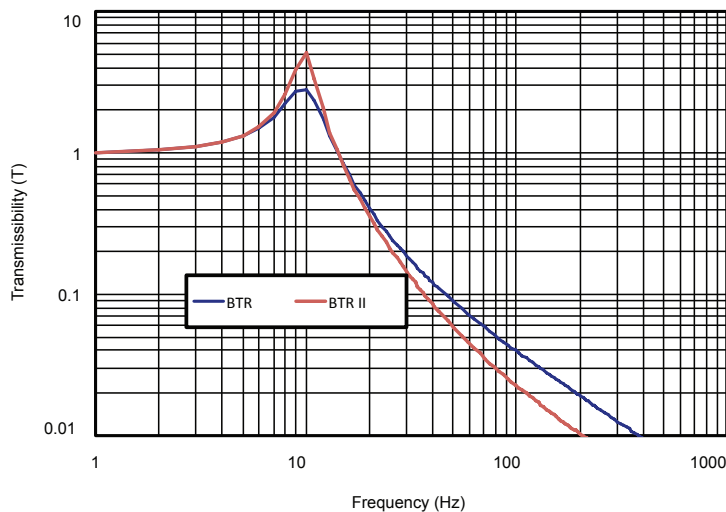
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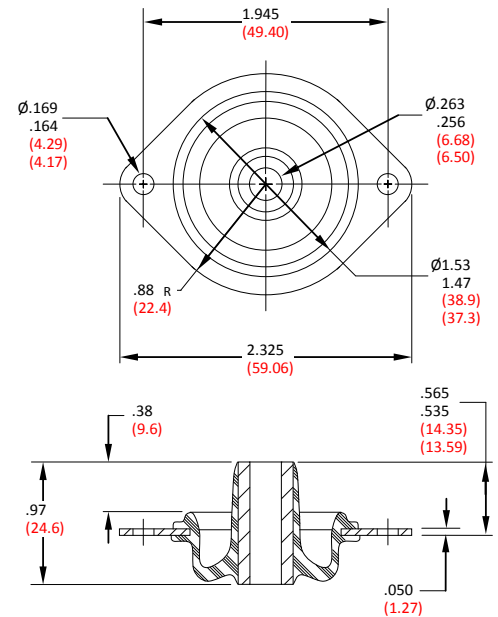
**TABLE 2 – SNUBBING WASHER DIMENSIONS**

Part Number	Outside Diameter	Inside Diameter	Thickness
J-2049-2D			
in	1.38	0.26	0.05
mm	35.0	6.6	1.3

**FIGURE 2 – TRANSMISSIBILITY VS. FREQUENCY**



**FIGURE 1 – PART DIMENSIONS**



Metric values in parenthesis.

**FIGURE 2 – TRANSMISSIBILITY VS. FREQUENCY**