



SUPERSOFT URETHANE STUD MOUNTS



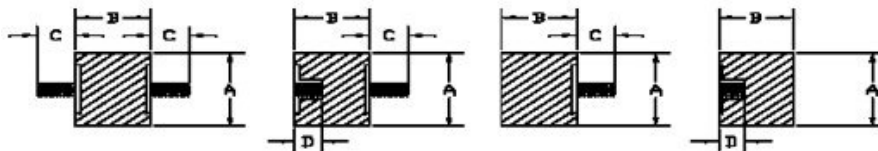
- Custom Sizes Available.
- Supersoft High Damping Urethane.
- Soft, Pliable, Physically Strong.

Supersoft Urethane Stud Mounts are available in two sizes and with various mounting configurations. All stud mounts are available in three different hardness; 30 Shore 00, 50 Shore 00 and 70 Shore 00. Suits loads from 0.5 ~ 5kgs per mount. It is recommended to use a lock nut or double jam nut to ensure the mount does not vibrate loose.

Larger PCBs, disk drives, optical drives, small motors, small pumps and lightweight electronic 'boxes' often need small compact mounting solutions in traditional stud or sandwich mount configuration. Small compact mounting solutions in traditional stud or sandwich mount configuration. Made from super soft high damping urethanes which can out perform traditional rubber mounts and are compact enough for narrow space enclosures.

These provide high performance damping, isolation and shock and motion control in more demanding electronic environments.

Dimensional Data



| Metric Thread Products | | | Dimensions (mm) | | | | Load Per Mount (kg) | | |
|------------------------|----------------|--------|-----------------|------|----|---|---------------------|-----------|-----------|
| Part Number | Style | Thread | A | B | C | D | 30 Duro | 50 Duro | 70 Duro |
| SMM-10M4-30 | Male / Male | M4 | 10.0 | 8 | 7 | - | tba | - | - |
| SMM-10M4-50 | Male / Male | M4 | 10.0 | 8 | 7 | - | - | 0.5 – 1.0 | - |
| SMM-10M4-70 | Male / Male | M4 | 10.0 | 8 | 7 | - | - | - | 3.5 – 5.5 |
| SMM-20M4-30 | Male / Male | M4 | 20.0 | 12.7 | 12 | - | tba | - | - |
| SMM-20M4-50 | Male / Male | M4 | 20.0 | 12.7 | 12 | - | - | 0.5 – 1.0 | - |
| SMM-20M4-70 | Male / Male | M4 | 20.0 | 12.7 | 12 | - | - | - | 3.5 – 5.5 |
| SMF-20M4-30 | Male / Female | M4 | 20.0 | 12.7 | 12 | - | tba | - | - |
| SMF-20M4-50 | Male / Female | M4 | 20.0 | 12.7 | 12 | - | - | 0.5 – 1.0 | - |
| SMF-20M4-70 | Male / Female | M4 | 20.0 | 12.7 | 12 | - | - | - | 3.5 – 5.5 |
| SMB-10M4-30 | Male / Blank | M4 | 10.0 | 8 | 7 | - | tba | - | - |
| SMB-10M4-50 | Male / Blank | M4 | 10.0 | 8 | 7 | - | - | 0.5 – 1.0 | - |
| SMB-10M4-70 | Male / Blank | M4 | 10.0 | 8 | 7 | - | - | - | 3.5 – 5.5 |
| SMB-20M4-30 | Male / Blank | M4 | 20.0 | 12.7 | 12 | - | tba | - | - |
| SMB-20M4-50 | Male / Blank | M4 | 20.0 | 12.7 | 12 | - | - | 0.5 – 1.0 | - |
| SMB-20M4-70 | Male / Blank | M4 | 20.0 | 12.7 | 12 | - | - | - | 3.5 – 5.5 |
| SFB-10M4-30 | Female / Blank | M4 | 10.0 | 8 | 7 | - | tba | - | - |
| SFB-10M4-50 | Female / Blank | M4 | 10.0 | 8 | 7 | - | - | 0.5 – 1.0 | - |
| SFB-10M4-70 | Female / Blank | M4 | 10.0 | 8 | 7 | - | - | - | 3.5 – 5.5 |
| SFB-20M4-30 | Female / Blank | M4 | 20.0 | 12.7 | 12 | - | tba | - | - |
| SFB-20M4-50 | Female / Blank | M4 | 20.0 | 12.7 | 12 | - | - | 0.5 – 1.0 | - |
| SFB-20M4-70 | Female / Blank | M4 | 20.0 | 12.7 | 12 | - | - | - | 3.5 – 5.5 |

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SUPERSOFT URETHANE STUD MOUNTS

Material Properties

| Property | 30 | 50 | 70 | Units |
|---|-----------|------------------------------|-----------|--------------------|
| Shore Hardness | 30 | 50 | 70 | Shore 00 |
| Tensile Strength at Break | 5.87 | 8.64 | 14.52 | Kg/cm ₃ |
| % Elongation at Break | 8.82 | 568 | 399 | % |
| Tensile Elastic Stress at 100% Strain | 1.26 | 1.79 | 4.66 | Kg/cm ₃ |
| Tensile Elastic Stress at 200% Strain | 2.56 | 3.86 | 8.95 | Kg/cm ₃ |
| Tensile Elastic Stress at 300% Strain | 3.87 | 5.65 | 11.69 | Kg/cm ₃ |
| Compressive Stress at 20% Strain | 0.45 | 0.85 | 2.11 | Kg/cm ₃ |
| Compressive Stress at 50% Strain | 6.07 | 7.4 | 16.34 | Kg/cm ₃ |
| Tear Strength | 7.81 | 8.72 | 11.69 | Kg/cm ₃ |
| Bulk Modulus | - | 2.86 | - | gPascal |
| Static Coefficient of Friction (on polished steel) | 15.8 | 10.4 | 4.1 | - |
| Kinetic Coefficient of Friction (on polished steel) | 3.3 | 2.6 | 2.5 | - |
| Density | 1.368 | 1.36 | 1.358 | gm/c c |
| Specific Gravity | 1.372 | 1.364 | 1.363 | - |
| Optimum Temperature Range* | -15 | to | 98 | °C |
| Glass Transition Temperature | -38.7 | -37.4 | -34.7 | °C |
| Flash Ignition Temperature | - | 317 | - | °C |
| Self Ignition Temperature | - | 417 | - | °C |
| Flammability Rating (Flame Retardant versions available to special order) | V-1 / V-2 | V-1 / V-2 | V-1 / V-2 | - |
| Resilience Test Rebound Height | 2 | 11 | 22 | % |
| Resilience Test Rebound Height*** | 16 | 18 | 25 | % |
| Dielectric Strength | 241 | 256 | 261 | v/mil |
| Dynamic Young's Modulus at 5 Hz | 6.34 | 7.4 | 8.45 | Kg/cm ₃ |
| Dynamic Young's Modulus at 15 Hz | 9.51 | 10.67 | 11.41 | Kg/cm ₃ |
| Dynamic Young's Modulus at 30 Hz | 13.1 | 14.79 | 16.7 | Kg/cm ₃ |
| Dynamic Young's Modulus at 50 Hz | 17.33 | 19.02 | 21.14 | Kg/cm ₃ |
| Tangent Delta at 5 Hz Excitation | 0.3 | 0.56 | 0.56 | - |
| Tangent Delta at 15 Hz Excitation | 0.38 | 0.58 | 0.6 | - |
| Tangent Delta at 30 Hz Excitation | 0.45 | 0.57 | 0.59 | - |
| Tangent Delta at 50 Hz Excitation | 0.35 | 0.5 | 0.55 | - |
| Bacterial Resistance | - | No Growth | - | - |
| Fungal Resistance | - | No Growth | - | - |
| Heat Aging | - | Stable | - | - |
| Ultraviolet | - | Good | - | - |
| Ozone | Can Be Co | - | - | - |
| Chemical Resistance to Hydraulic Fluid | - | -1.4 | - | % |
| Chemical Resistance to Kerosene | - | 4.3 | - | % |
| Chemical Resistance to Diesel | - | 6.4 | - | % |
| Chemical Resistance to Soap Solution | - | 5 | - | % |
| Acoustic Properties: Transmission in air | - | Greater than 40 [^] | - | dec/cm |

* Reduced strength and damping up to 120C. Increased spring rate down to glass transition temperature.

** Underwriters Laboratory 94 Compatibility.

*** Modified for the effects of material tack.

[^] At 50 hertz. Transmission loss increases with frequency.

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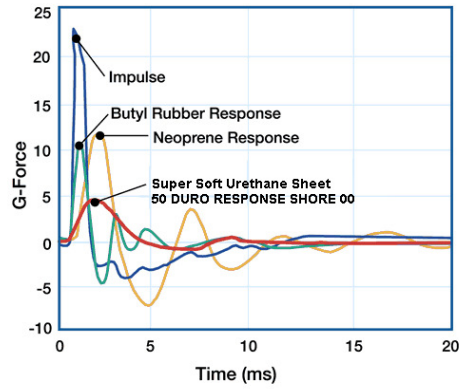
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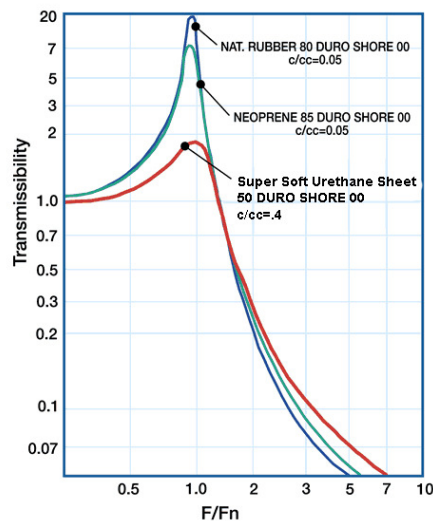
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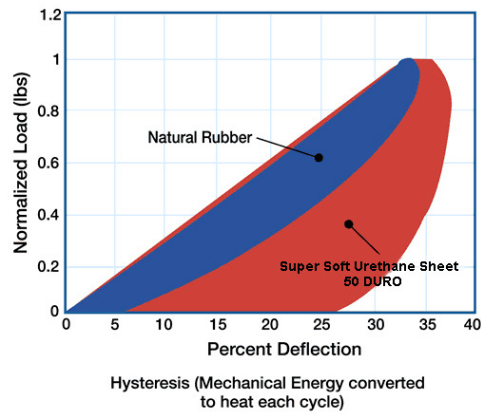
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Time Delay Effect of Impulse (Shock) Response of Selected Materials



Ratio of Excitation Frequency to Natural Frequency



Hysteresis (Mechanical Energy converted to heat each cycle)

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