

We have one goal — improving the noise and vibration quality of our customers' products. Roush delivers innovative, effective noise and vibration control products and solutions. By combining advanced analysis capabilities, comprehensive engineering services, and state-of-the-art facilities, Roush has become a proven partner in identifying and resolving challenging noise and vibration issues. Backed by the diverse capabilities of the Roush family of companies, we are uniquely equipped to provide turnkey noise and vibration solutions.

Roush... your silent partner in developing smoother, quieter products.

Damping Adhesive — RA218

Product Description

RA218 is a permanent pressure sensitive acrylic-based adhesive formulated to have high damping for joining dissimilar materials where UV and environmental resistance is needed. This material is excellent for laminating or constrained-layer damping applications.

Features

RA218 features excellent room temperature adhesion to most surfaces with a high ultimate bond and high cohesive strength. RA218 is very stable, resistant to UV exposure and thermal aging, and will maintain consistent performance over a long product life. This material also has excellent damping performance over a broad temperature and frequency range with peak damping centered at room temperature.

Typical Physical Properties

Adhesive Thickness.....	2 mil, 5 mil or custom
Release Liner.....	Self-wound paper liner
Peel Adhesion ¹ (PSTC-3).....	5.0 lbs/in minimum after 24 hrs. dwell backed with 1 mil polyester
Peel Adhesion ¹ (PSTC-3).....	5.0 lbs/in minimum after 24 hrs. dwell backed with 4 mil dead soft aluminum

Temperature Range:

Adhesion.....	for best results, adhesion should be performed above 60°F
Damping@1000Hz.....	Excellent damping from 40°F to 150°F
Operating ²	-30°F to 220°F

Chemical Resistance:

Water Resistance.....	Excellent
Humidity Resistance.....	Excellent

Shelf Life: Two years when stored under cool, dry conditions out of direct sunlight (70°F, 50% RH)

Note: (1) Peel Adhesion values for 2 mil adhesive samples performed as per PSTC #3 which states 1 minute max dwell time.

(2) Defines temperature range material can operate within. Above 300°F, material will soften and flow due to thermoplastic nature.





NOISE AND
VIBRATION
CONTROL
PRODUCTS

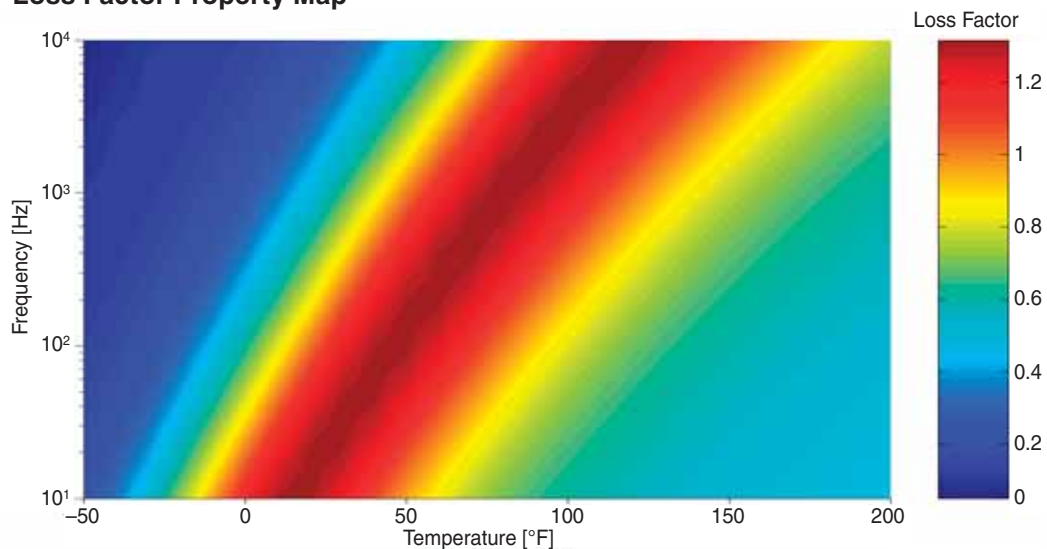
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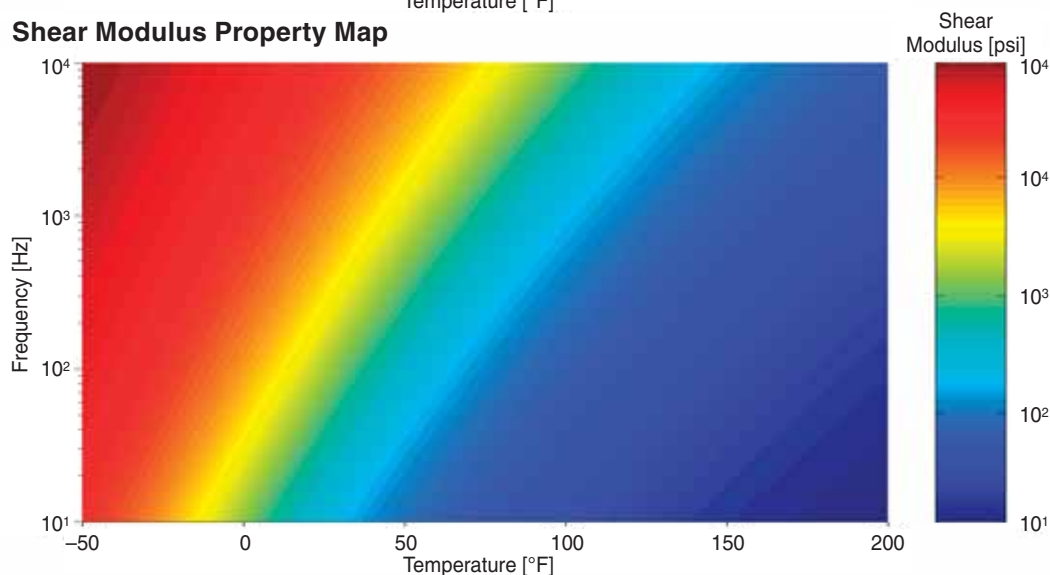
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RA218 Dynamic Material Properties (ASTM E756 Test Results)

Loss Factor Property Map



Shear Modulus Property Map



Contact us for a Temperature-Frequency Nomogram.

Full Service Noise and Vibration Control Support

Let Roush assist you with your noise and vibration control activities. We offer a full range of design, engineering, testing, and manufacturing capabilities.

As an alternative to this material, we can search our database of over 3,000 materials to identify other potential material solutions. Once selected, Roush uses design and analyses to optimize the configuration of the material for your specific application.

Roush provides manufacturing operations to convert this material into a finished part that can be delivered to your specifications. Roush has many worldwide partners that provide a wide array of low cost manufacturing processes with high quality production output.

Contact us or visit our website at www.roushind.com/NVH for more detailed information on Roush's full-service capabilities.

Product Performance and Suitability:

All information regarding the use of Roush products identified in this datasheet is believed to be reliable by Roush, but are not product specifications and must only be used as a guide. Roush does not represent or warrant that its products are fit for a particular purpose or that they do not infringe any U.S. or foreign patents. Purchaser must independently determine the suitability of the Roush products for their particular application. Unless written otherwise in Roush's Terms and Conditions of Sale for the product, this datasheet or any verbal statements made by any other distributor, salesman or representative about the product will not be deemed to create an express warranty of any kind.