

*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 — RA985

### Product Description

RA985 is an acrylic-based viscoelastic adhesive designed to be a quick-tack, repositionable adhesive that provides a consistent level of damping over a broad temperature and frequency range. The material is designed to have dynamic material properties mirroring those of RA980 adhesive, but with a permanent repositioning ability. This is achieved by reducing the tack level of the material, and long term bond strength, thus making this product ideal for both damping and label applications in the computer hard disk drive/electronics market.

### Features

RA985 damped viscoelastic adhesive offers superior damping performance over a wide temperature and frequency range with peak damping achieved from 90 F to 140°F for most applications. RA985 is very stable, resistant to UV exposure, thermal aging and creep/relaxation effects, and will maintain consistent performance over a long product life. RA985 is a repositionable adhesive with reduced tack, and permanent re-workability that resists time-aging effects on bond strength.

### Typical Physical Properties

Adhesive Thickness.....	1 mil, 2 mil, 4 mil
Release Liner .....	Paper/PET, silicone/low-extractable silicone liners
180° Peel Adhesion <sup>1</sup> (ASTM D3330 PSTC-1) .....	4.0 lbs/in minimum after 24 hrs. dwell @ R.T., or 15 minutes @ 150°F
Shear Adhesion <sup>1</sup> @ 4 psi (PSTC-7).....	24 hrs. minimum
Temperature Range:	
Adhesion.....	for best results, adhesion should be performed above 50°F
Damping @ 1000Hz .....	Excellent damping from 55°F to 155°F
Operating <sup>2</sup> .....	0°F to 200°F
Water, Humidity and Solvent Resistance.....	Excellent
Outgassing:	
Organo-Tin Content <sup>3</sup> .....	None detected, below measurement limits

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

**Note:** (1) 180° Peel Adhesion and Shear Adhesion values for 2 mil adhesive samples.

(2) Defines temperature range material can operate within. Above 250°F, material will soften and flow due to thermoplastic nature.

(3) Samples digested in acid solution, and metal analysis performed using ICP Mass Spectrometry.





NOISE AND  
VIBRATION  
CONTROL  
PRODUCTS

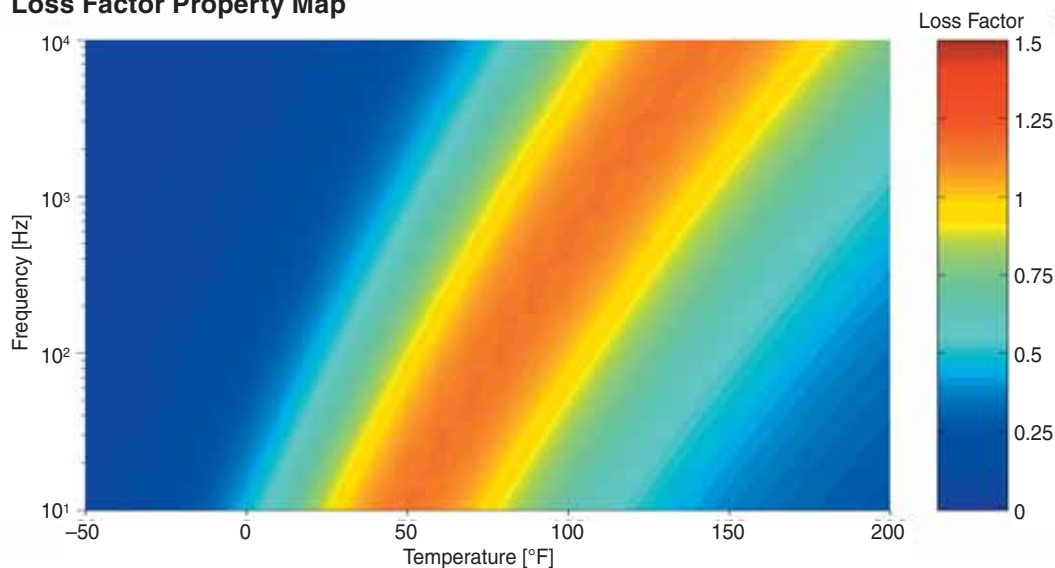
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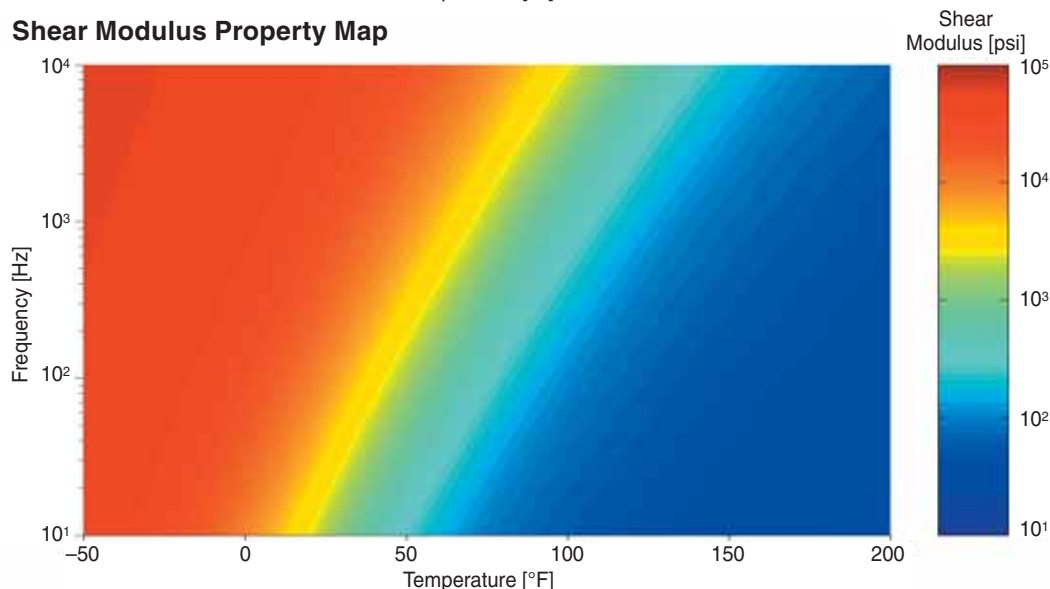
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## RA985 — Dynamic Material Properties (ASTM E756 Test Results)

### 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](http://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.