



CUMING MICROWAVE

Application Note 300-18

ENHANCED PRESSURE SENSITIVE ADHESIVE FOR SILICONE ABSORBER SHEETS (PPGA)

RoHS
Compliant

Several grades of C-RAM absorber materials can be supplied with our enhanced peel-and-stick, pressure sensitive adhesive. This adhesive can be supplied with all grades of silicone sheet absorber materials from the 310 Series as well as the RGD-S material. **The suffix "PPGA" is added to the part number of absorber materials with this adhesive.** For example: "C-RAM RGD-S-124/PPGA"

We do not recommend using PSA on iron or ferrite filled rubber sheets greater than 0.125 inches (3.2 mm) due to the heavy weight of such sheets.

It should be noted that many of the silicone based sheet materials have service temperature ranges of -50 to +174 °C (-65 to +345 °F). Use of acrylic pressure sensitive adhesive will restrict application use temperature as shown below. For high reliability applications, such as temperature extremes, high and continuous vibration, or space applications, we do not recommend the use of a pressure sensitive adhesive. Instead, a silicone RTV adhesive should be used.

TYPICAL PROPERTIES

Adhesive type: Two-sided, supported acrylic adhesive with polyester film carrier
Nom. thickness: .0045 in (0.11 mm) w/o liner
Release liner: Brown Kraft Paper
Service Temp: -40 to +121 °C
(-40 to +250 °F)
Peel strength: PSTC#1 -- initial 56-75 oz/in
ultimate 70-75 oz/in
Shear strength: PSTC#7 -- medium >7 Days

METHOD OF APPLICATION

Absorber material is applied simply by peeling the backing paper from the adhesive layer, and pressing the absorber piece into place. The adhesive has an initial medium tack, and develops an ultimate high tack within 24 hours. Additionally, the use of heat and pressure (not to exceed the service temperature) during application can increase the strength of the initial bond.

The adhesive layer, which is acrylic based, will adhere to most common plastics, metals, and ceramics. Substrate surfaces should be cleaned with alcohol to remove any dirt or machine oils.

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