



PRODUCT DATA SHEET

G-1018 GLASS TRANSFER TAPE

General Information

G-1018 Glass transfer tape is a low temperature sealing and glazing glass for use on ferrites, soft glass, high temperature ceramics and low expansion metals. This vitreous lead boro-silicate glass has a very low softening point. If applied in a thin layer, a large variety of glass, ceramic and metal parts can be glazed with this material without cracking or stresses due to thermal expansion mismatch. This material is specifically suggested for protective overlayers where the temperature is to be kept at the lowest possible value. G-1018 Glass Transfer Tape fires gray in color.

Physical Properties

Glass Family.....	Lead-borosilicate
Glass Type.....	Vitreous
Softening Point.....	390°C
Annealing Point.....	330°C
Working Temperature.....	440-460°C
Thermal Expansion Coefficient.....	104 x 10 ⁻⁷ in/in/°C
Dielectric Constant, 1 Megacycle, 25°C.....	17

Sealing Procedures

1. Start at room temperature with 5 - 20 psi of pressure on the parts to be sealed to insure proper flow of the molten glass. This is not necessary for glazing.
2. Heat from room temperatures to 440 - 460°C at a rate of approximately 5°C/ min. This is about a 90 minute heat-up. Air or inert atmospheres may be used.
3. Hold at peak temperature for 40 - 60 minutes.
4. Cool slowly; minimum cooling time is 90 minutes. Slower cooling (such as overnight) is also suitable.

The above firing cycle is a general recommendation. The amount of weight needed and mass of the parts to be sealed may require longer or shorter heat-ups and holds. A higher final temperature may require a shorter hold. Experiment to determine the ideal hold for your particular sealing requirement.

Ordering Information

G-1018 Glass Transfer Tape is made to order. A thickness of .001-.002" is generally suggested for most glazing or sealing operations. This is a non-adhesive coated tape. Thicker tapes can be made to order. Maximum width is 9". For larger production runs, preforms from G-1018 tape can be made to order. The tape is available slit to any width (.125" minimum). Please phone or fax for additional information and pricing.

The logo for Vitta, featuring the word "Vitta" in a stylized, italicized, serif font.

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