EPOXY STRUCTURAL ADHESIVE E-110

E-110 is a high performance unfilled single component modified epoxy adhesive which can be cured at 125°C or 140°C to provide exceptional shear strength in combination with high peel strength, impact resistance, and good temperature resistance. Especially suitable for applications for bonding bearings and magnets and other applications where dissimilar materials are bonded and must withstand long term thermal cycling and the 180°C cure temperature of E-107 cannot be tolerated. Offers much higher hot bond strength and long term durability then modified acrylic adhesives or conventional epoxies. Has good adhesion to plastics as well as metal and ceramics. Because it is unfilled it does create a bondline gap which would lead to reduced magnetic circuit efficiency or dimensional variation.

PROPERTIES
appearance......................................................................................................................yellow viscous paste
specific gravity...........................................................................................................................................1.1
viscosity.........................................................................................................................................thixotropic
lap shear aluminum to aluminum, cured 2 hour at 125°C, tested at RT...........................................................................................................3,000 psi
tested at 200°C....................................................................................................................................300 psi
maximum continuous use temperature................................................................................................140°C
maximum short time use temperature..........................................................................................190°C
bond line thickness.........................................................................................................................0.0007 in.

CURE CONDITIONS
Cure according to any of the following cure schedules:

1hr 140°C,  2hr 125°C,  4hr 115°C

All times are for time at the specified temperature as measured at the bondline. Time must be allowed for the bondline to reach temperature. This can be minimized by using high speed curing methods such as infrared, hot air tunnel etc.

STORAGE
Refrigerated storage is desirable. Shelf life is at least 12 months at 0°C, 5 months at room temperature (25°C)

HANDLING
All contact with skin or ingestion should be avoided in accordance with normal handling procedures with epoxy resins. No warranty or guarantee is made regarding this material. The user should determine suitability for a given application. For more information see MSDS.

PRICING
2 oz. jar $40.00 ea., 12 oz cartridge $63.00 ea.