

**Hysol GR60HT**

LMC20079-88B

Oct 2017 update

**PRODUCT DESCRIPTION**

Hysol GR60HT provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Filler Type	Silica
Filler Weight, %	86±1
Product benefit	Green Mold compound Good warpage control Good workability High Thermal conductivity Low moisture absorption High reliability
Target Package	IPM
Flammability	UL 94 V0 @ 1/8 inch thickness

Hysol GR60HT is a high thermal conductivity and low stress molding compound designed for IPM (Intelligent Power Module).

HYSOL GR60HT meets UL 94 V-0 Flammability at 3.175mm thickness.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Property	Typical Value
Gel Time, @175°C,seconds	35
Spiral flow, @175°C,cm	58
Shelf Life, @ 5°C, days	183
Specific gravity, g/cm <sup>3</sup>	2.22

**TYPICAL PROCESS DATA**

Handling	Typical Value
Preheat Temperature, °C	75-100
Molding Temperature, °C	150-190
Molding Pressure, Kg/cm <sup>2</sup>	30-70
Transfer Time, seconds	10-30
Curing Time, seconds	90-160
Post Cure Time, hours	2-6

Hysol GR60HT has been formulated to provide the best possible moldability and as wide a molding latitude as possible. Although molding and curing conditions will vary from situation to situation, recommended starting ranges are shown above.

**TYPICAL PROPERTIES OF CURED MATERIAL**

All measurements are taken at 25°C unless otherwise noted. All physical, electrical and analytical measurements taken on specimens cured for 2 minutes @ 175°C with post cure of 6 hours @ 175°C, unless otherwise specified.

**Physical Properties**

Property	Typical Value
Viscosity@175°C, Pa.s	65
Glass Transition Temperature(Tg), °C	119
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg	19
Above Tg	44
Flexural Modulus, N/mm <sup>2</sup> @ 25°C	19625
Flexural Strength, N/mm <sup>2</sup> @ 25°C	137
Moisture Absorption, %:	
24 hours @ 121°C/2atm	0.20

**Application Specific Properties**

Property	Typical Value
Thermal Conductivity, W/mk	2.2
Volume resistance, 10E15Ω.cm	5.0

**GENERAL INFORMATION**

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

**Not for product specifications**

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product

**Storage**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Powder Storage - Powder or preforms should be stored at 5°C or below, in closed containers. After removal from cold storage, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination. The suggested waiting time for a standard 22 Kg pail is 24 hours.

Material removed from containers may be contaminated during use. Do not return product to the original container. Hysol Huawei Electronics Ltd. cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

**Conversions**

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil



mm / 25.4 = inches  
N x 0.225 = lb  
N/mm x 5.71 = lb/in  
N/mm<sup>2</sup> x 145 = psi  
MPa x 145 = psi  
N·m x 8.851 = lb·in  
N·m x 0.738 = lb·ft  
N·mm x 0.142 = oz·in  
mPa·s = cP

**NOTE**

This product is a developmental product. It is not now, and may not be in the future, commercially available. The properties of the uncured material and the physical properties of the cured material have been established as a point of reference only. The information provided in this Lab Data Sheet (LDS) including the recommendations for use and application of the product are based on our best knowledge and experience of the product as at the date of this LDS. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.

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