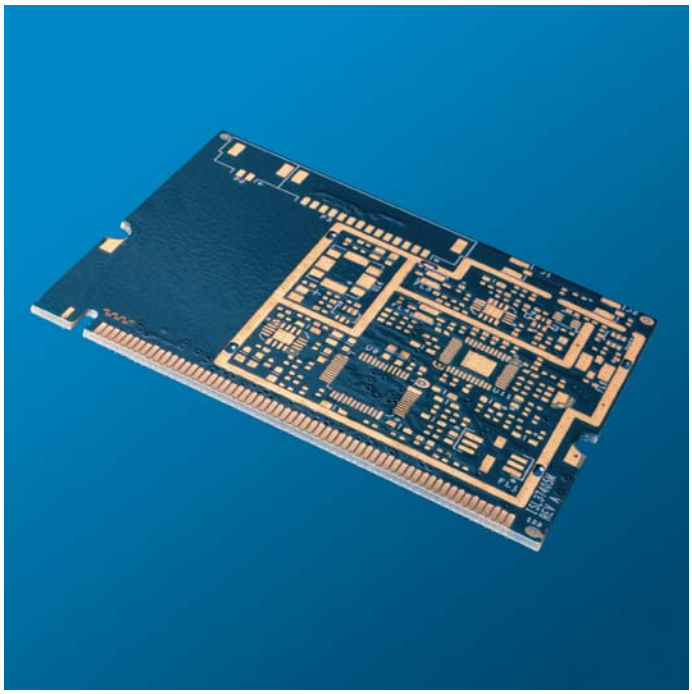
GORE™ G630 Prepreg DATA SHEET

GORE™ G630 Prepreg—the lowest loss microvia material affording the best cost/performance solution for high frequency microvia modules and PCBs. This high performance dielectric consists of standard BT resin in a continuous toughening matrix.



Product Attributes

Electrical

- Low dielectric loss for signal traces and buried passives (reduced insertion and pass-band losses)
- Low Dk provides faster signal speeds
- Stable Dk (2.6) and loss (0.004) from 1 MHz–40 GHz
- Superior thickness uniformity for controlled impedance layers

Reliability

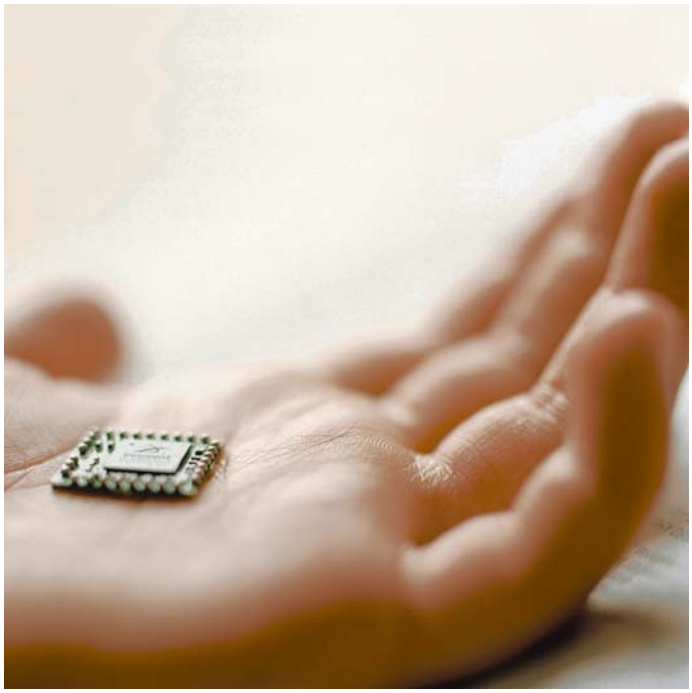
- High Tg for Pb-free and thermal cycle reliability
- Micro reinforced for superior crack resistance

Processing

- Laser drilling throughput 2–5x faster than glass prepregs
- Standard desmear processing, plasma preferred
- Fills buried vias during lamination (design dependent)
- Controlled resin flow for cavity module and PCB designs

High Density

- Excellent surface planarization for fine lines
- Thinner dielectric layers for improved microvia aspect ratios and reduced substrate thickness and weight
- Smaller vias for increased design freedom



Typical Applications

- WLAN, Bluetooth, and power amplifier RF modules
- Optical transceiver modules
- High speed telecom and computing microvia PCBs

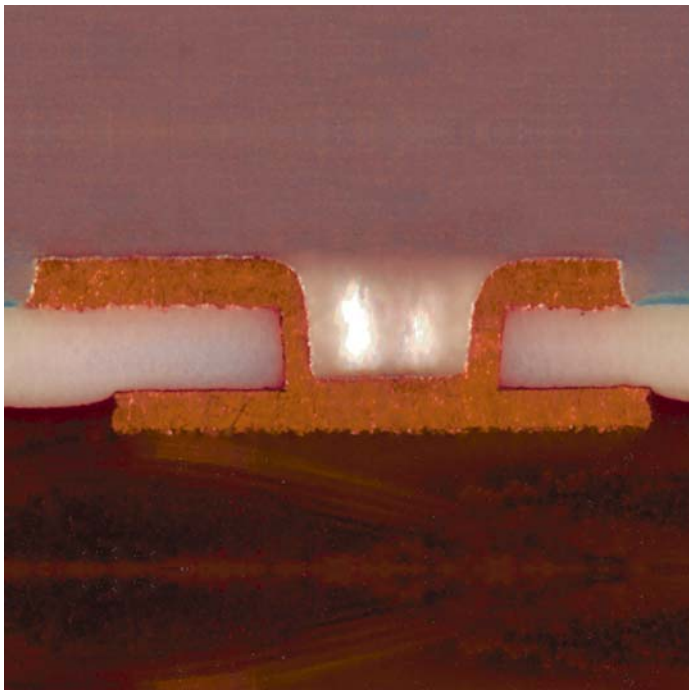
W. L. Gore & Associates

North America:
1 (800) 445-4673
International:
1 (302) 292-5100

Europe:
+49/91 44/6010
+44/1392-561511
www.gore.com/electronics

GORE
Creative Technologies Worldwide

Material Properties			
Property	**Unit**	**Test Condition**	**Typical Value**
Dielectric constant (Dk)	—	Split post resonant cavity (1 MHz–40 GHz)	2.6
Loss tangent (Df)	—	Split post resonant cavity (1 MHz–40 GHz)	0.004
Peel strength	Kg/cm (pli)	17 µm (1/2 oz) VLP foil	1.0 (5.6)
Solder resistance	—	288°C; 6x30 sec	Pass
CTE (X, Y, Z)	ppm/°C	TMA (–55 to +200°C)	56
Glass transition temperature	°C (°F)	TMA	185 (365)
Thickness	µm (mil)		38, 57, 86 (1.5, 2.2, 3.4)



Country	Telephone Number
China	+86/ 21-6485-4990
France	+33/ 160-79-6079
Germany	+49/ 91-44-6010
Japan	+81/ 3-3327-0011
Korea	+82/ 2-393-3411
North America	+1/ 302-292-5100
Singapore	+65/ 275-4673
Taiwan	+886/ 2-8771-7799
United Kingdom	+44/ 1-382-561511

W. L. Gore & Associates

North America:
1 (800) 445-4673
International:
1 (302) 292-5100

Europe:
+49/91 44/6010
+44/1392-561511
www.gore.com/electronics

GORE
Creative Technologies Worldwide

03/04 AGS