HD4110GS NMP-Free Solvent Negative Polyimide

HD MicroSystems going Green

Greener Industrial Standard Polyimide Technology for Stress buffer and Packaging applications

Introduction

HD4110GS is an NMP-free version of HD4110, which has been an industry proven polyimide technology for semiconductor stress buffer and packaging applications.

Major benefits include:

- Safer solvent system (NMP-free)
- Highest performance and reliability assured by its lithographic, mechanical, thermal, electrical, chemical, reliability and storage stability performance parity to HD4110
- Minimum qualification effort due to copy exact • methodology
- Ready to use with new and existing qualified applications

Packaging and Storage

HD4110GS is supplied in 1-kilogram and 4-kilogram bottles. All material should be frozen for long-term storage and smoothly thawed before opening when planned to use.

Handling Precautions

Before using these products, consult the Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

Technical Service

HD MicroSystems has dedicated technical service facilities in Hitachi City, Japan and Parlin, New Jersey. Technical support personnel are available to work in-house on dedicated process tools or on location throughout the world to assist in process development or help resolve technical problems. For more information, contact your regional HD MicroSystems Technical Representative.

HD4110GS performance parity to conventional film

	Unit	HD4110GS	HD4110
NMP-free	-	Yes	No
Tensile strength	MPa	215	200
Elongation	%	50	45
Modulus	GPa	4.1	4.0
Tg (TMA)	°C	285	285
CTE (100-200°C)	ppm/K	65	65
Td5	°C	445	430
Residual stress	MPa	33	33
Dk (at 10 GHz)	-	3.2	3.2
Df (at 10 GHz)	-	0.0108	0.0107
Dielectric strength	kV/mm	385	385

(Film cured at 375degC for 1hr)

+49-6102-18.1823

+49-6102-18.1824

United States	Japan	Europe
HD MicroSystems L.L.C.	HD MicroSystems, Ltd.	HD MicroSystems GmbH
250 Cheesquake Road	JR Shinjuku Miraina Tower	Hugenottenallee 175 63263 Neu-Isenburg
Parlin. NJ 08859-1241	1-6 Shinjuku 4-chome, Shinjuku-ku	
800-346 5656 ext 14/15	Tokyo 160-0022	Germany

300-346.5656 ext.14/15 +1-732.694-3876

токуо 160-0022 +81-3-3868.8121

www.hdmicrosystems.com

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