

Product Identification

Film Name: PECVD 50X Oxynitride
 Process ID: D01P5X
 Scientific: Silicon Oxynitride - SiON
 Classification: Standard

Applications

Passivation Thick Structures
 Insulation Layer
 Inter-layer Dielectric Encapsulation
 Patterning
 Adhesion Layer

Features

Low Cost
 Variable Processing Parameters
 Large Batch Capacity
 Low Temperature - Widely Variable
 Custom Fixturing Available

Standards & Guarantees

Inspection: Standard I/O - First & Last
 Thickness - Guarantee up to 3um, Reference up to 5um
 Index - Guarantee up to 3um, Reference up to 5um

Items may vary when ordering outside the standard

Other Information

- 50X Oxynitride Film Stress: This film has a nominal film stress of 0 MPa.

Film Specifications

Film Thickness	Standard	1000A to 10,000A ± 10%
	Adjustable Range	500A to 50,000A ± 10%
Refractive Index	Standard	1.75 ± .05
	Adjustable Range	Fixed
Film Uniformity	Edge to Edge	10%
	Across Load	10%
Deposition Temp	Standard	380C
	Adjustable Range	100C to 600C
Film Stress	Standard	0MPa +/- 50MPa
	Adjustable Range	Fixed

Film Properties

Electrical	Insulating Quality	Variable
	Dielectric Constant	N/A
Mechanical	Hydrogen Inclusion	Moderate
	Scratch Protect	Good
	Masking Ability	Good
	Diffusion Barrier	Variable
	Thermal Stability	Good
Etch Rate	BOE (50%)	Variable
	KOH	N/A
	Plasma	Moderate
Hydrology		N/A