



## PRODUCT BULLETIN

### ***Novaflex*<sup>®</sup> HD**

High Density  
Flexible Circuit Interconnect

#### **Layers**

- 1 or 2-layer

#### **Base Material**

- *Novaclad*<sup>®</sup> adhesiveless laminate - 50 $\mu$  (.002") polyimide

#### **Copper**

- 1/8 oz/ft<sup>2</sup> - 5 $\mu$  (.00018") Base copper: 1/2 oz/ft<sup>2</sup> - 15 $\mu$  (.0007") finished thickness
- 1/8 oz/ft<sup>2</sup> - 5 $\mu$  (.00018") Base copper: 1 oz/ft<sup>2</sup> - 35 $\mu$  (.0014") finished thickness

#### **Soldermask/Dielectric**

- Photoimageable coverlay
- Screen printed polyimide ink
- Polyimide film 25 $\mu$  (.001")

#### **Surface Finish**

- Antitarnish
- *Shelcoat*<sup>®</sup> - OSP - organic solderability preservative
- Tin/lead - electroplated
- Tin/lead - Hot air solder leveled (HASL)
- Nickel/Gold - electroplated

#### **Conductor Width and Space**

- 1/2 oz/ft<sup>2</sup> - 15 $\mu$  (.0007") finished thickness - 125 $\mu$  (.005") minimum
- 1 oz/ft<sup>2</sup> - 35 $\mu$  (.0014") finished thickness - 178 $\mu$  (.007") minimum

#### **Soldermask/Dielectric Definition**

- See Sheldahl *Novaflex*<sup>®</sup> HD Flexible Circuit Design Guideline

#### **Via Holes/Pad Sizes**

- .381mm (.015") finished hole size minimum (.431mm (.017") punched hole size)
- 1.04mm (.041") minimum pad size or oversized from hole by .305mm (.012") per side

## Design Capability

- Sheldahl has an extensive design capability. Design data and net lists can be input and output in a wide variety of standard industry formats

## Prototype Capability

- Sheldahl has a fully staffed prototype facility that will provide prototypes in 2-3 weeks

