

# Alumina Ceramic Microstrip Lines

#### Description

We are expanding our ceramics capabilities and opening up the sales of high-speed ceramics. The substrate is comprised of Aluminum Oxide (AI2O3) 96% with both the top metal and bottom metal finished in Gold. The devices have embedded Vias to offer good RF performance. The microstrip transmission line is a RF Ground Backed Co-Planer Waveguide (GB-CPW). The metal stack up has been optimized to offer good adhesion for gold bond wire.

Aluminum Wire bondability has not been tested.

#### Features

- Low Tan(δ)
- Compact Size
- Embedded Vias to offer smooth surface finish
- Wirebondable
- Gold Finish
- Lead-Free
- RoHS Compliant
- 0.01"/0.254mm thickness

#### Applications

- Device packaging
- Semi Conductor ICs
- High Speed Devices





IMPORTANT NOTICE: more Information on warranty, changes, rights, notices, and other information are presented at the end of this data sheet. If the sheet is not present, refer to <u>www.nuphotonics.com</u> for the company issued data sheet.



Part # TL-01G



Part # TL-01B



Part # TL-01



Part # TL-02

### Description

 $50 \; \Omega \;$  GB-CPW with Laser and Photodiode ground pad.

Size: 3.5x1x0.254 mm

#### Description

 $50\,\Omega\,$  GB-CPW Bias-T. The ceramic is designed to except 0201 RLC components.

Size: 3.5x2x0.254 mm

## Description

 $50\,\Omega\,$  GB-CPW transmission line.

Size: 3.2x1x0.254 mm

## Description

 $50~\Omega~$  GB-CPW transmission line. This is designed for hermetic packages that will use 0.01"/0.25mm RF pin to excite the RF field. The transition between the RF pin to the microstrip line has been optimized for low-loss.

Size: 5x5x0.254 mm

We will be expanding our ceramics line. Please check back for updates.



#### **Contact us**

### Inquiry

For all questions related to our products please feel reach out to <u>inquiry@Nuphotonics.com</u>. We are more than happy to offer custom solutions if needed.

#### Sales:

For all sales related topics please feel reach out to <a href="mailto:sales@nuphotonics.com">sales@nuphotonics.com</a>



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Alpha Build: Devices in Alpha build are in internal engineering build and testing stages.

Beta Build: Devices in Beta build are for external customers and engineering sample testing stages.

Production Build: Customer ready devices

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