CHIP ON BOARD / WIRE BONDING

**Design Rules for Aluminium (Al) wire bonding**

Chip Pad to Substrate Pad Orientation is Parallel.

- Chip Pad x/y > 80 µm
- Chip to substrate pad: 1.5 x chip thickness
- Substrate pad length: 300 µm
- Substrate pad width: ≥ 150 µm
- Space ≥ 100 µm
- Al wires can be bonded at any angle between chip pad to substrate pad.

Example of an optimal orientation of the bonding pads to the wire bonds.

**Design Rules for Gold (Au) wire bonding**

Chip Pad to Substrate Pad Must Be Aligned in the Same Direction.

- Chip Pad x/y > 80 µm
- Chip to substrate pad: 1.5 x chip thickness
- Substrate pad length: 300 µm
- Substrate pad width: ≥ 150 µm
- Space ≥ 100 µm

REM magnification of a wire bonded diode in a multi-step Lasercavity.

The solder mask must be released as block in the area of the bond pads.

Example of an optimal orientation of the bonding pads to the wire bonds.

More support than you expect.

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Do you have questions about fabrication data, tolerances, test documentation or packaging? In our Technical Delivery Specification for printed circuit boards (TDS) you will find our standards and recommendations for smooth and effective cooperation.

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