

# MMA030AA Bonding Diagram

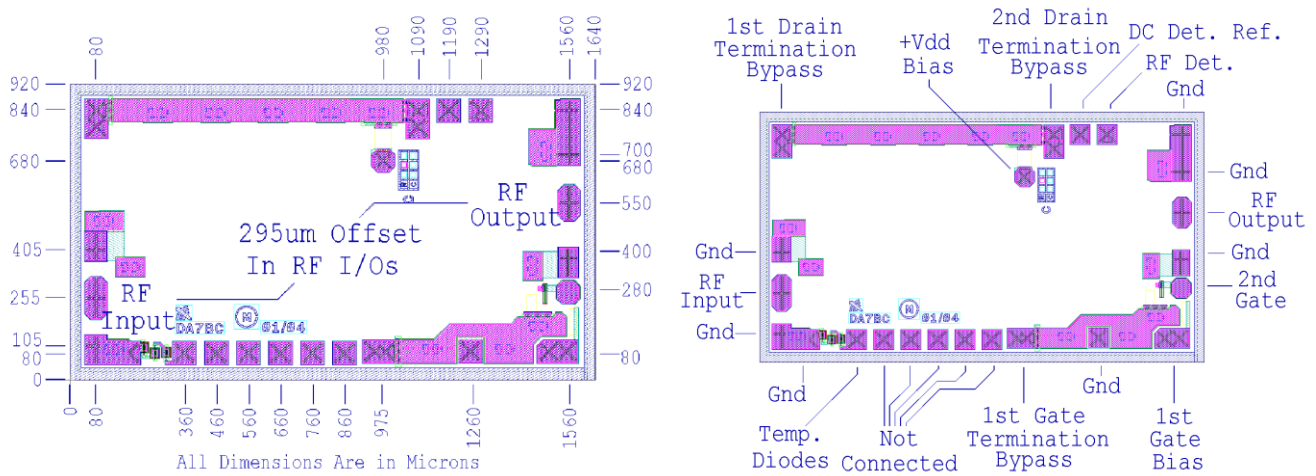


Figure 1. Die size, pad locations, and pad descriptions

Chip size: 1640x920  $\mu\text{m}$  (64.6x36.2mil)  
 Chip size tolerance:  $\pm 5 \mu\text{m}$  (0.2mil)  
 Chip thickness: 100  $\pm 10 \mu\text{m}$  (4  $\pm 0.4\text{mil}$ )  
 Pad dimensions: 80x80  $\mu\text{m}$  (3.1x3.1mil)

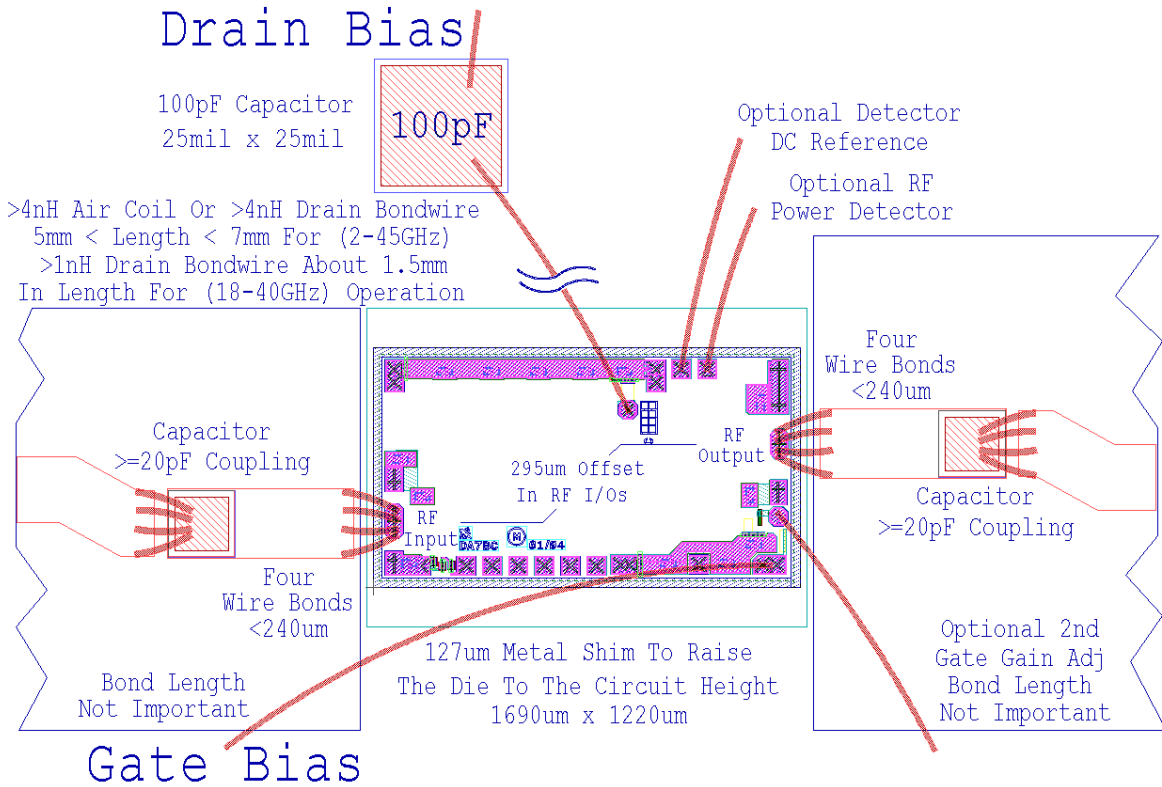
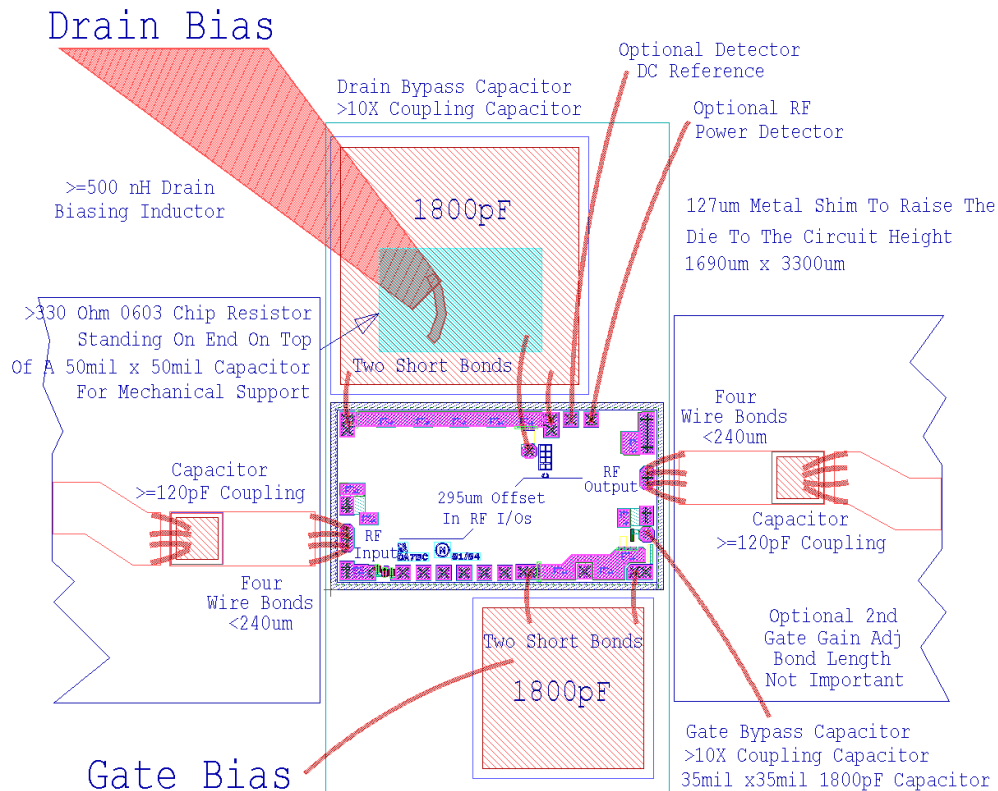


Figure 2.2 – 45 GHz bonding diagram



**Figure 3. 40MHz - 45GHz bonding diagram**

### Pick-up and Chip Handling

This MMIC has exposed air bridges on the top surface. **Do not pick up chip with vacuum on the die center**; handle from edges or use a collet.

### Thermal Heat Sinking

To avoid damage and for optimum performance, you must observe the maximum channel temperature and ensure adequate heat sinking.

### ESD Handling and Bonding

**This MMIC is ESD sensitive**; preventive measures should be taken during handling, die attach, and bonding.

**Epoxy die attach is recommended.** Please review our application note [MM-APP-0001 GaAs MMIC handling and die attach recommendations](#), on our website for more handling, die attach and bonding information.



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