

# EPCDESIGNTOOL\_LG-EM Mechanical Die for Electromigration Testing

EPCDESIGNTOOL\_LG-EM are sized equivalent to EPC device <u>EPC2001C</u> with die size 4.1 mm x 1.6 mm.

These devices have internal metal layers shorted for electromigration reliability testing.

#### Figure 1: Die Photo for EPCDESIGNTOOL\_LG-EM



### Figure 2: Die Outline (Solder Bar View)



| DIM | MICROMETERS |         |      |
|-----|-------------|---------|------|
|     | MIN         | Nominal | MAX  |
| А   | 4075        | 4105    | 4135 |
| В   | 1602        | 1632    | 1662 |
| С   | 1379        | 1382    | 1385 |
| d   | 577         | 580     | 583  |
| е   | 235         | 250     | 265  |
| f   | 195         | 200     | 205  |
| g   | 400         | 400     | 400  |

Pad 1 is Gate; Pads 3, 5, 7, 9, 11 are Drain Pads 4, 6, 8, 10 are Source

#### Pad 2 is Substrate

#### NOTE: Drain and Source are internally shorted at Metal 1 to create a metal resistor

**Figure 3: Side View** 





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Figure 4: Recommended Land Pattern (units in µm)

Land pattern is solder mask defined. Solder mask opening is 180 µm.

Recommended stencil should be 4mil (100 µm) thick, must be laser cut,

Stencil opening can be per the bump drawing.



### Pad 1 is Gate; Pads 3, 5, 7, 9, 11 are Drain Pads 4, 6, 8, 10 are Source Pad 2 is Substrate

Additional assembly resources available at epc-co.com/epc/DesignSupport/AssemblyResources.aspx

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