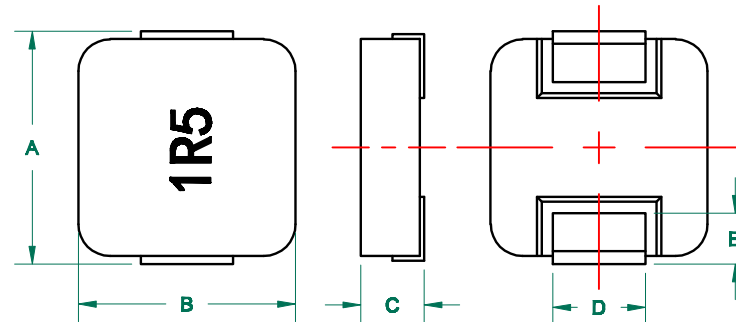
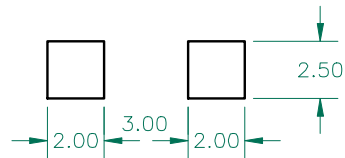


# MGV05031R5M-10

## PHYSICAL DIMENSIONS:

|   |      |   |      |
|---|------|---|------|
| A | 5.50 | ± | 0.50 |
| B | 5.10 | ± | 0.30 |
| C | 3.00 | ± | 0.30 |
| D | 1.50 | ± | 0.30 |
| E | 1.20 | ± | 0.50 |

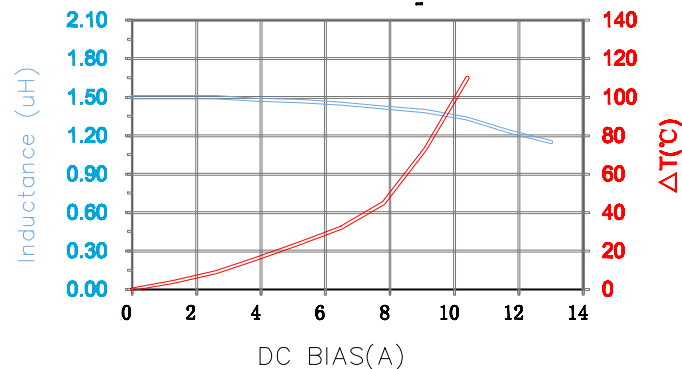
## LAND PATTERNS FOR REFLOW SOLDERING



**UNCONTROLLED  
DOCUMENT**



**RoHS**



|                                              | Min  | Nom  | Max  |
|----------------------------------------------|------|------|------|
| INDUCTANCE (uH)<br>L @ 100KHz/0.25V<br>± 20% | 1.20 | 1.50 | 1.80 |
| DCR (mΩ)                                     |      |      | 20.7 |

|                                                   |       |
|---------------------------------------------------|-------|
| Saturation Current <sup>3</sup><br>Isat (A)       | 11.00 |
| Temperature Rise<br>Current Irms <sup>4</sup> (A) | 7.20  |

NOTES: UNLESS OTHERWISE SPECIFIED

- COMPONENTS SHOULD BE ADEQUATELY PREHEATED BEFORE SOLDERING.
- OPERATION TEMPERATURE RANGE:  
-40°C~+125°C (INCLUDING SELF-HEATING).
- DEFINITION OF SATURATION CURRENT (ISAT): DC CURRENT AT WHICH THE INDUCTANCE DROPS ≤25% FROM ITS VALUE WITHOUT CURRENT.
- DEFINITION OF TEMPERATURE RISE CURRENT (IRMS): DC CURRENT THAT CAUSES THE TEMPERATURE RISE (ΔT ≤40°C) FROM 25°C AMBIENT.

| DIMENSIONS ARE IN mm. |  |  |  | This print is the property of Laird Tech. and is loaned in confidence subject to return upon request and with the understanding that no copies shall be made without the written consent of Laird Tech. All rights to design or invention are reserved. |                  |        |     |
|-----------------------|--|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|-----|
|                       |  |  |  |                                                                                                                                                                                                                                                         |                  |        |     |
|                       |  |  |  |                                                                                                                                                                                                                                                         |                  |        |     |
|                       |  |  |  |                                                                                                                                                                                                                                                         |                  |        |     |
|                       |  |  |  |                                                                                                                                                                                                                                                         |                  |        |     |
|                       |  |  |  | PROJECT/PART NUMBER:                                                                                                                                                                                                                                    | MGV05031R5M-10   | REV    | A   |
|                       |  |  |  | DATE:                                                                                                                                                                                                                                                   | 04/03/13         | SCALE: | NTS |
|                       |  |  |  | CAD #                                                                                                                                                                                                                                                   | MGV05031R5M-10-A | TOOL # | -   |
|                       |  |  |  | REV                                                                                                                                                                                                                                                     | DESCRIPTION      | DATE   | INT |
|                       |  |  |  |                                                                                                                                                                                                                                                         |                  |        |     |



PART TYPE: POWER INDUCTOR  
DRAWN BY: QIU

SHEET: 1 of 1