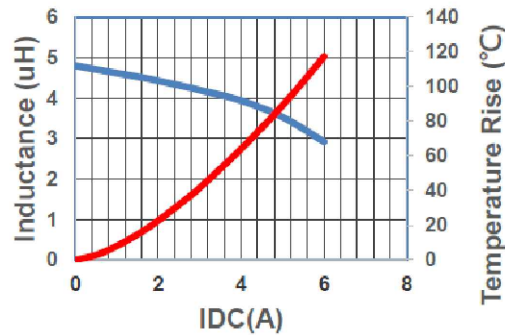
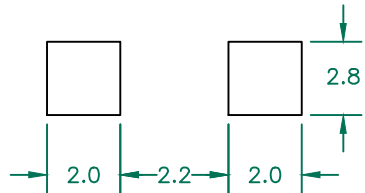


# MGV05024R7M-12

## PHYSICAL DIMENSIONS:

|   |      |   |      |
|---|------|---|------|
| A | 5.50 | ± | 0.50 |
| B | 5.10 | ± | 0.30 |
| C | 2.00 | ± | 0.40 |
| D | 2.50 | ± | 0.30 |
| E | 1.10 | ± | 0.30 |

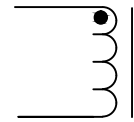
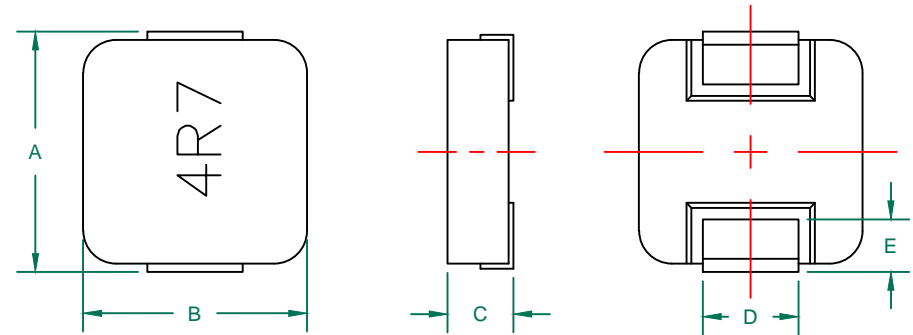
## LAND PATTERNS FOR REFLOW SOLDERING



## ELECTRICAL SPECIFICATION @ 25°C

|   | Min  | Nom  | Max    |
|---|------|------|--------|
| INDUCTANCE (uH)<br>L @ 100 KHz/0.25V<br>± 20% | 3.76 | 4.70 | 5.64   |
| DCR (Ω)                                       |      |      | 0.1166 |

|   |      |
|---|------|
| Saturation Current <sup>3</sup><br>Isat (A)       | 5.00 |
| Temperature Rise<br>Current Irms <sup>4</sup> (A) | 2.80 |



RoHS

NOTES: UNLESS OTHERWISE SPECIFIED

- COMPONENTS SHOULD BE ADEQUATELY PREHEATED BEFORE SOLDERING.
- OPERATION TEMPERATURE RANGE:  
-55°C~+125°C (INCLUDING SELF-HEATING) .
- SATURATION CURRENT Isat IS DEFINED AS MAXIMUM AMOUNT OF CURRENT BY WHICH INDUCTANCE WILL DROP BY APPROXIMATELY VALUE OF 30% OF INITIAL INDUCTANCE (Ta=25±5°C).
- DEFINITION OF TEMPERATURE RISE CURRENT (IRMS):  
DC CURRENT THAT CAUSES THE TEMPERATURE RISE (ΔT APPROXIMATELY 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. |                |           |  |
|-----------------------|----------------|----------|-----|---|----------------|-----------|--|
|                       |                |          |     | <b>Laird</b>  |                |           |  |
| PROJECT/PART NUMBER:  |                |          |     | REV   | PART TYPE:     | DRAWN BY: |  |
| MGV05024R7M-12        |                |          |     | A   | POWER INDUCTOR | Jonson    |  |
| DATE:                 |                |          |     | SCALE:  | SHEET:         |           |  |
| 08/17/18              |                |          |     | NTS   | 1 of 1         |           |  |
| A                     | ORIGINAL DRAFT | 08/17/18 | QIU | CAD #   | TOOL #         |           |  |
| REV                   | DESCRIPTION    | DATE     | INT | MGV05024R7M-12-A  |                |           |  |