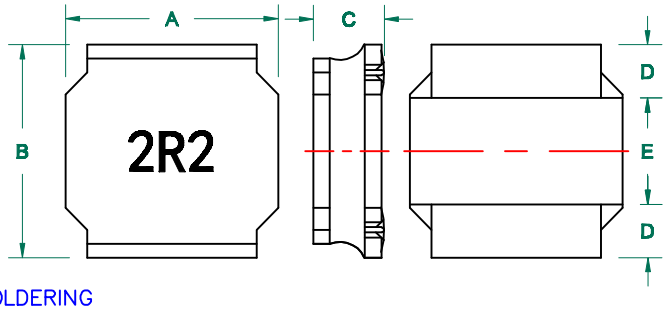
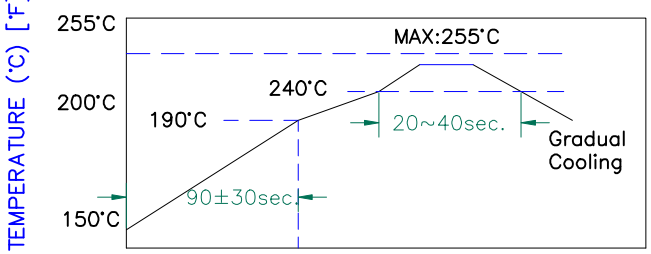
# TYS40122R2N-10

## PHYSICAL DIMENSIONS:

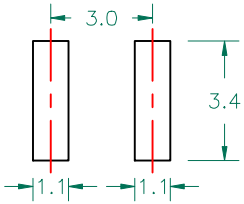
| | | | |
|---|---|---|---|
| A | 4.00 | ± | 0.20 |
| B | 4.00 | ± | 0.20 |
| C | 1.20 | | MAX. |
| D | 0.95 | ± | 0.20 |
| E | 2.10 | ± | 0.20 |

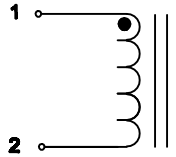



## RECOMMENDED SOLDERING CONDITIONS




## LAND PATTERNS FOR REFLOW SOLDERING




RoHS 2002/95/EC

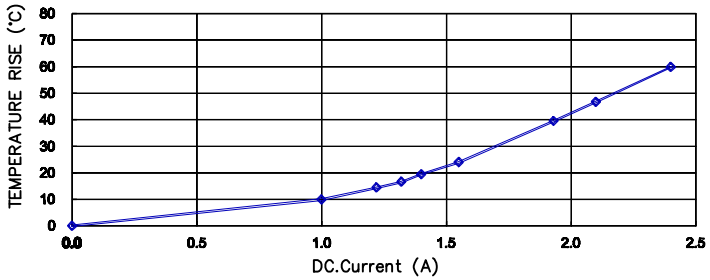
Pb

## ELECTRICAL SPECIFICATION

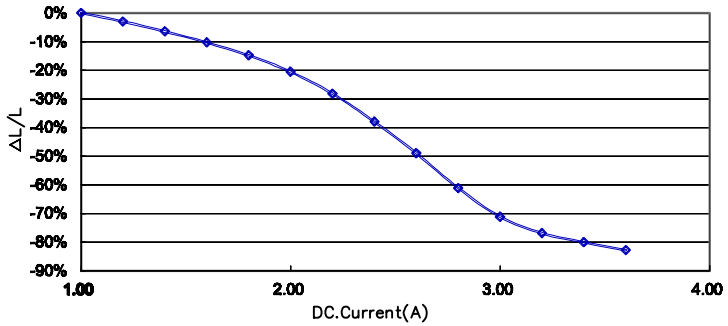
| | Min | Nom | Max |
|---|---|---|---|
| INDUCTANCE (uH) L @ 100 KHz/1V ± 30% | 1.54 | 2.20 | 2.86 |
| DCR (Ω) | | 0.080 | 0.104 |

| | |
|---|---|
| Saturation Current(A) | 1.76 |
| SRF (MHz) | 74 |
| Temperature Rise Current (A) | 1.32 |

## CHARACTERISTICS OF TEMPERATURE RISE




## CURRENT VS INDUCTANCE DROP IN RATES




**UNCONTROLLED DOCUMENT**

NOTES: UNLESS OTHERWISE SPECIFIED

1. OPERATING TEMPERATURE RANGE: −25°C TO +125°C (INCLUDING SELF−HEATING) .
2. STORAGE TEMPERATURE RANGE (PACKAGING CONDITIONS): −10°C TO +40°C AND RH 70% (MAX.)
3. UNLESS OTHERWISE SPECIFIED, THE STANDARD ATMOSPHERIC CONDITIONS FOR MEASUREMENT/TEST AS:
   A. AMBIENT TEMPERATURE: 20±15°C.
   B. RELATIVE HUMIDITY: 65%±20%.
4. SATURATION CURRENT (ISAT):DEFINITION OF SATURATION CURRENT (ISAT): DC CURRENT AT WHICH THE INDUCTANCE DROPS APPROXIMATE 30% FROM ITS VALUE WITHOUT CURRENT.
5. TEMPERATURE RISE CURRENT (IRMS): DEFINITION OF TEMPERATURE RISE CURRENT: DC CURRENT THAT CAUSES THE TEMPERATURE RISE (ΔT ≤40°C) FROM 20°C AMBIENT.

| REV | DESCRIPTION | DATE | INT |
|---|---|---|---|
| B | CHE TEMP,TOLERANCE,LAND PATTERNS | 12/19/12 | QIU |
| A | ORIGINAL DRAFT | 11/22/11 | QIU |

DIMENSIONS ARE IN mm .



Laird TECHNOLOGIES

| | | | |
|---|---|---|---|
| PROJECT/PART NUMBER: TYS40122R2N−10 | REV: B | PART TYPE: POWER INDUCTOR | DRAWN BY: QIU |
| DATE: 11/22/11 | SCALE: NTS | SHEET: 2 of 2 | |
| CAD #: TYS40122R2N−10−B | TOOL #: − | | |