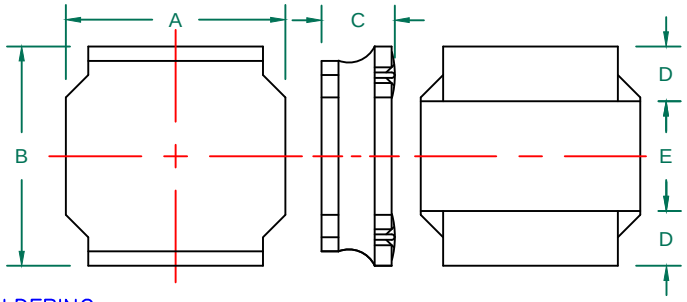
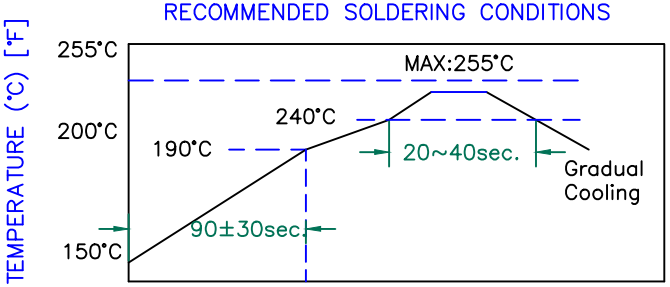
TYS30102R2N-10

PHYSICAL DIMENSIONS:

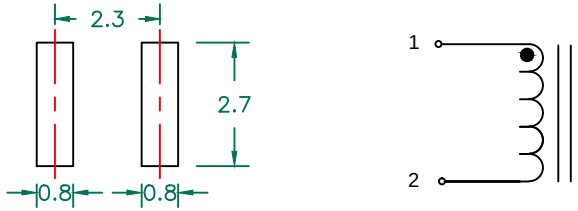
A	3.00	±	0.20
B	3.00	±	0.20
C	1.00	±	0.20 0.30
D	0.75	±	0.20
E	1.50	±	0.20



RECOMMENDED SOLDERING CONDITIONS



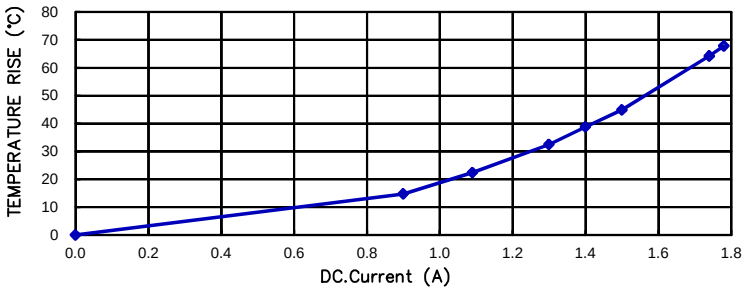
LAND PATTERNS FOR REFLOW SOLDERING



ELECTRICAL SPECIFICATION

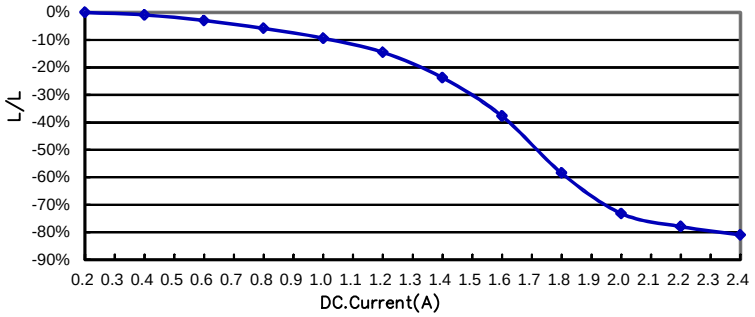
	Min	Nom	Max
INDUCTANCE (uH) L @ 100 KHz/1V ± 30%	1.54	2.20	2.86
DCR (Ω)		0.110	0.143

CHARACTERISTICS OF TEMPERATURE RISE



Saturation Current(A)	1.15
SRF (MHz)	100
Temperature Rise Current (A)	1.09

CURRENT VS INDUCTANCE DROP IN RATES



NOTES:

1. OPERATION TEMPERATURE RANGE: −40°C~+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 IS THE DC CURRENT AT WHICH THE INDUCTANCE DROPS OFF APPROXIMATELY 30% FROM ITS VALUE WITHOUT CURRENT.(AMBIENT TEMPERATURE 25±5°C)

5. TEMPERATURE RISE CURRENT (IRMS):
   DC CURRENT THAT CAUSES THE TEMPERATURE RISE (△T ≤40°C) FROM 25°C AMBIENT.

DIMENSIONS ARE IN mm .

REV	DESCRIPTION	DATE	INT
D	CHANGE DIMENSIONS: C/D/E	07/28/16	QIU
C	CHANGE TEMP FROM −25°C~+125°C	12/17/12	QIU
B	CHE TEMP,TOLERANCE,LAND PATTERNS	03/19/12	QIU
A	ORIGINAL DRAFT	11/22/11	QIU

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.

Laird

PROJECT/PART NUMBER: TYS30102R2N−10	REV: D	PART TYPE: POWER INDUCTOR	DRAWN BY: QIU
DATE: 11/22/11	SCALE: NTS	SHEET: 1 of 1	
CAD #: TYS30102R2N−10−D	TOOL #: −		