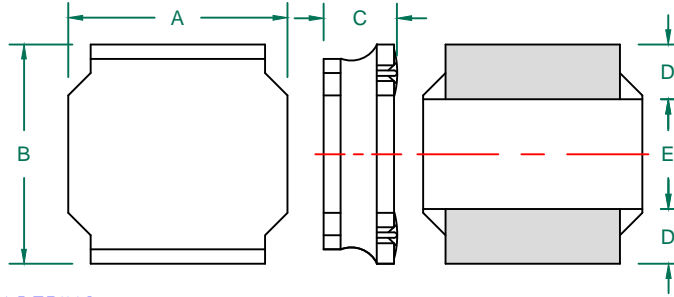


# TYS3012100M-10

## PHYSICAL DIMENSIONS:

A	3.00	±	0.20
B	3.00	±	0.20
C	1.20	+ / -	0.20 / 0.30
D	1.10	±	0.30
E	0.80	±	0.30



## RECOMMENDED SOLDERING CONDITIONS

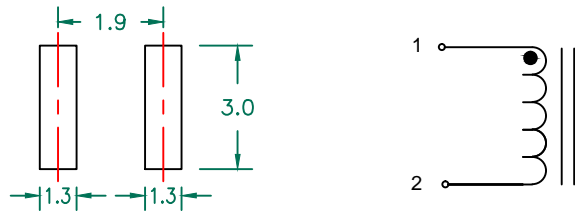


## ELECTRICAL SPECIFICATION

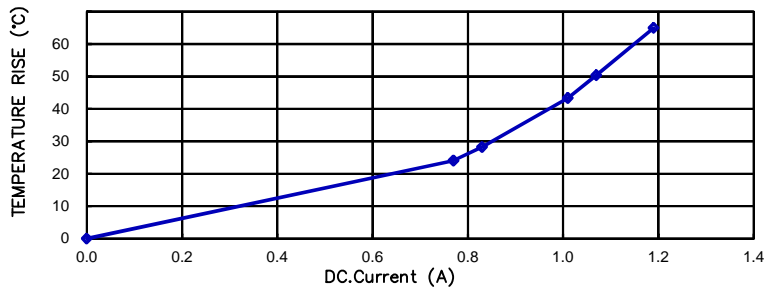
	Min	Nom	Max
INDUCTANCE (uH) L @ 100 KHz/1V ±20%	8.0	10.0	12.0
DCR (Ω)		0.265	0.3445

Saturation Current(A)	0.60
SRF (MHz)	42
Temperature Rise Current (A)	0.83

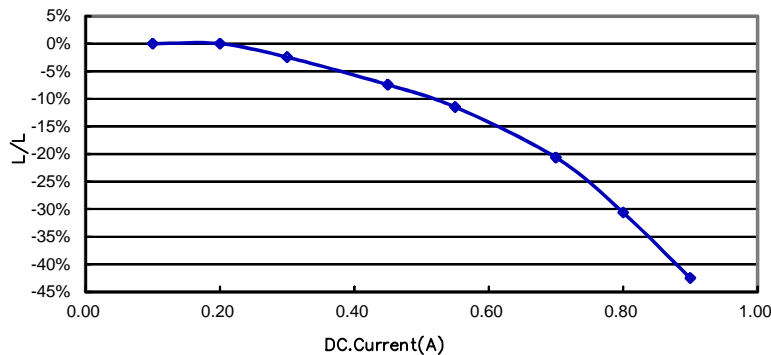
## LAND PATTERNS FOR REFLOW SOLDERING



## CHARACTERISTICS OF TEMPERATURE RISE



## CURRENT VS INDUCTANCE DROP IN RATES



RoHS

## NOTES:

- OPERATION TEMPERATURE RANGE: -40°C~+125°C (INCLUDING SELF-HEATING).
- STORAGE TEMPERATURE RANGE (PACKAGING CONDITIONS): -10°C TO +40°C AND RH 70% (MAX.)
- UNLESS OTHERWISE SPECIFIED, THE STANDARD ATMOSPHERIC CONDITIONS FOR MEASUREMENT/TEST AS:  
A. AMBIENT TEMPERATURE: 20±15°C.  
B. RELATIVE HUMIDITY: 65%±20%.
- SATURATION CURRENT IS THE DC CURRENT AT WHICH THE INDUCTANCE DROPS OFF APPROXIMATELY 30% FROM ITS VALUE WITHOUT CURRENT.(AMBIENT TEMPERATURE 25±5°C)
- TEMPERATURE RISE CURRENT (IRMS):  
DC CURRENT THAT CAUSES THE TEMPERATURE RISE ( $\Delta T \leq 40^\circ C$ ) 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:	
TYS3012100M-10				C	POWER INDUCTOR	QIU	
CHANGE DIMENSIONS: C/D/E				07/28/16	QIU		
CHANGE LOGO				07/28/15	QIU		
ORIGINAL DRAFT				08/07/12	QIU		
DATE:				08/07/12		SCALE:	NTS
CAD #				TYS3012100M-10-C		TOOL #	-
REV				DESCRIPTION		DATE	
						1 of 1	