



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

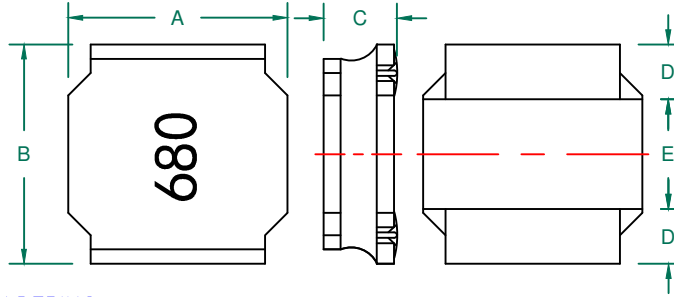
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# TYS8040680M-10

## PHYSICAL DIMENSIONS:

|   |      |        |              |
|---|------|--------|--------------|
| A | 8.00 | ±      | 0.30         |
| B | 8.00 | ±      | 0.30         |
| C | 4.00 | +<br>- | 0.20<br>0.30 |
| D | 2.45 | ±      | 0.30         |
| E | 3.10 | ±      | 0.30         |



## RECOMMENDED SOLDERING CONDITIONS

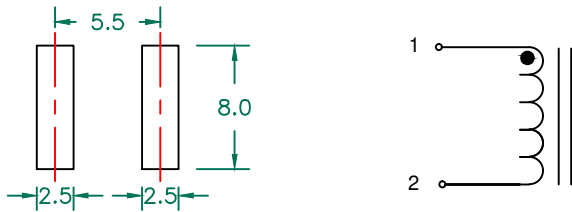


## ELECTRICAL SPECIFICATION

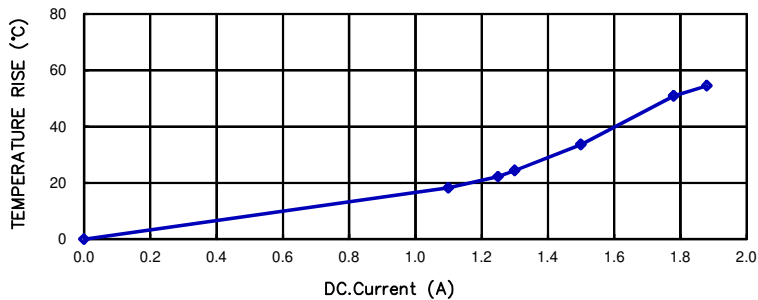
|   | Min  | Nom   | Max    |
|---|------|-------|--------|
| INDUCTANCE (uH)<br>L @ 100 KHz/1V<br>±20% | 54.4 | 68.0  | 81.6   |
| DCR (Ω)                                   |      | 0.196 | 0.2548 |

|                                 |      |
|---------------------------------|------|
| Saturation Current(A)           | 1.45 |
| SRF (MHz)                       | 4.9  |
| Temperature Rise<br>Current (A) | 1.25 |

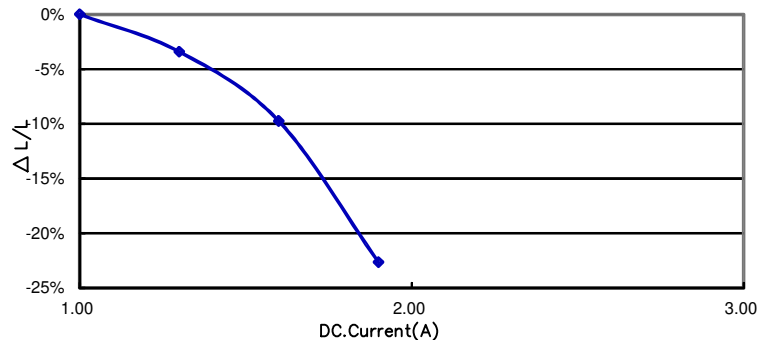
## LAND PATTERNS FOR REFLOW SOLDERING



## 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:
  - AMBIENT TEMPERATURE: 20±15°C.
  - 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 (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. |                |           |        |
|------------------------|--------------------------------|----------|-----|---|----------------|-----------|--------|
|                        |                                |          |     | <b>Laird</b>  |                |           |        |
| PROJECT/PART NUMBER:   |                                |          |     | REV   | PART TYPE:     | DRAWN BY: |        |
| TYS8040680M-10         |                                |          |     | C   | POWER INDUCTOR | QIU       |        |
| C                      | CHANGE DIMENSIONS C/D/E        | 08/18/16 | QIU | DATE:   | 06/01/12       | SCALE:    | NTS    |
| B                      | CHANGE TEMP. FROM -25°C~+125°C | 12/26/12 | QIU | CAD #   |                | TOOL #    |        |
| A                      | ORIGINAL DRAFT                 | 06/01/12 | QIU | TYS8040680M-10-C  |                |           |        |
| REV                    | DESCRIPTION                    | DATE     | INT |   |                |           | 1 of 1 |