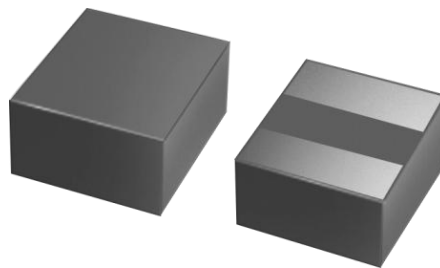
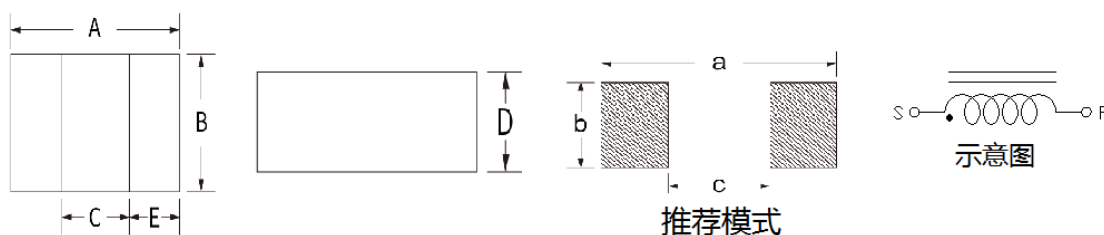


## 1、产品概要 / Outline

- ◆ 大电流和低损耗的金属材料一体压铸
- ◆ 高性能 ( Isat ) 由金属粉尘芯实现，低损耗由低 Rdc 实现
- ◆ 闭合磁路设计减少泄漏磁通量。
- ◆ 乙烯热喷涂，更好的表面致密性
- ◆ 极小体积一体成型电感
- ◆ 工作温度：-55℃~+125℃
- ◆ 适用通信设备、平板电脑、智能手机、便携式游戏机、智能穿戴、Wi-Fi 模块等



## 2、外观尺寸/ Appearance size 单位:mm



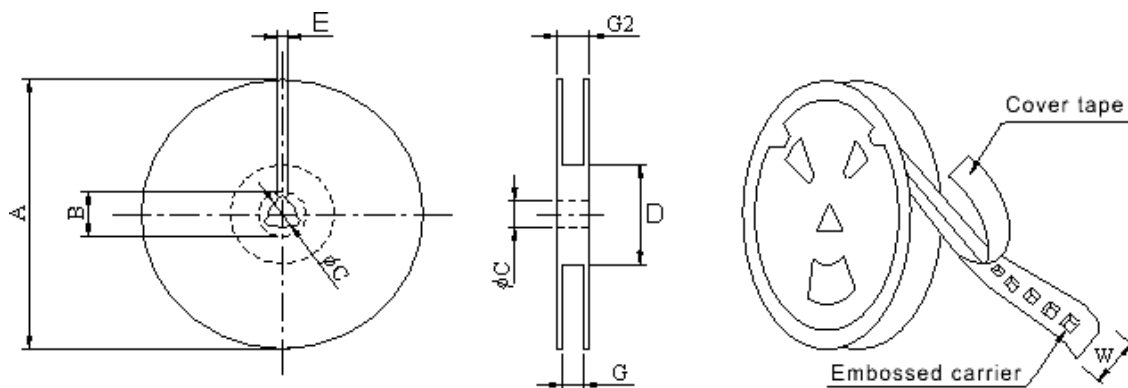
| A       | B       | C       | D        | E        | a   | b   | c   |
|---------|---------|---------|----------|----------|-----|-----|-----|
| 3.2±0.2 | 2.5±0.2 | 1.0±0.2 | 1.00Max. | 1.05±0.2 | 3.2 | 2.5 | 0.9 |

## 3、电气特性/Electrical characteristics

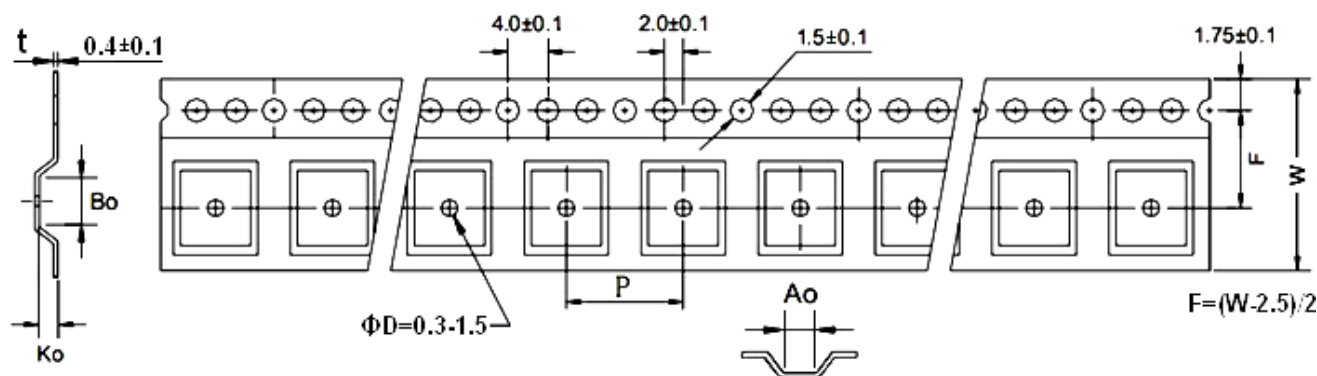
| 型号/NO            | L/uH  | DCR ( mΩ ) | Irms(A) | Isat(A) |
|------------------|-------|------------|---------|---------|
| TSEA322510-R22MB | 0.22  | 11.00      | 8.00    | 8.00    |
| TSEA322510-R33MB | 0.33  | 15.00      | 7.80    | 7.80    |
| TSEA322510-R47MB | 0.47  | 22.00      | 5.90    | 7.60    |
| TSEA322510-R68MB | 0.68  | 28.00      | 5.70    | 7.00    |
| TSEA322510-1R0MB | 1.00  | 30.00      | 4.90    | 5.30    |
| TSEA322510-1R5MB | 1.50  | 42.00      | 3.60    | 4.40    |
| TSEA322510-2R2MB | 2.20  | 66.00      | 3.40    | 3.50    |
| TSEA322510-3R3MB | 3.30  | 120.00     | 2.30    | 3.30    |
| TSEA322510-4R7MB | 4.70  | 140.00     | 1.90    | 2.50    |
| TSEA322510-6R8MB | 6.80  | 320.00     | 1.60    | 2.00    |
| TSEA322510-100MB | 10.00 | 365.00     | 1.80    | 1.80    |
| TSEA303020-150MB | 15.00 | 260.00     | 8.00    | 8.00    |
|                  |       |            |         |         |
|                  |       |            |         |         |

- ◆ K 表示电感值的公差为±10%，M 表示电感值的公差为±20%
- ◆ K said inductance tolerance is ±10%, M said inductance tolerance is ± 20%
- ◆ 所有数据基于环境温度 25℃条件下测试
- ◆ All data is based on testing at an ambient temperature of 25 °C
- ◆ 测试条件：100KHz/1.0V
- ◆ 本页面未能录入全部或最新的数据，请您在订购前向本公司咨询精准参数及样品。
- ◆ We were unable to input all or the latest data on this page. Please consult our company for accurate parameters and samples before placing an order.

## 4 包装规格/ Packaging specifications 单位/mm



| 型号         | 类型       | A(Ref.) | B(Ref.) | C(Ref.) | D(Ref.) | E(Ref.) | G(Ref.)  | G2(Ref.) |
|------------|----------|---------|---------|---------|---------|---------|----------|----------|
| TSEA100765 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA121065 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA160865 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA160808 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA141265 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA141207 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA141208 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201265 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201208 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201210 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201607 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201608 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201610 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA201612 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA252075 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA252008 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA252010 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA252012 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA322510 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA322512 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA322520 | 178*8mm  | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 8.5±0.5  | 10.5±0.5 |
| TSEA303010 | 178*12mm | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 12.5±0.5 | 14.5±0.5 |
| TSEA303012 | 178*12mm | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 12.5±0.5 | 14.5±0.5 |
| TSEA303015 | 178*12mm | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 12.5±0.5 | 14.5±0.5 |
| TSEA303018 | 178*12mm | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 12.5±0.5 | 14.5±0.5 |
| TSEA303020 | 178*12mm | 178±1   | 20±0.8  | 13±0.5  | 60±1    | 2.0±0.5 | 12.5±0.5 | 14.5±0.5 |
| TSEA404010 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA404012 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA404015 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA404020 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA404030 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA505020 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA505024 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |
| TSEA505030 | 330*12mm | 330±1   | 20±0.8  | 13±0.5  | 100±1   | 2.0±0.5 | 12.5±0.5 | 16.5±0.5 |



| 型号         | Ao              | Bo              | Ko        | W        | P | 数量<br>(Pcs/Reel) |
|------------|-----------------|-----------------|-----------|----------|---|------------------|
| TSEA100765 | 0.90±0.05       | 1.25±0.05       | 0.80±0.10 | 8.0±0.10 | 4 | 5000             |
| TSEA121065 | 1.30±0.05       | 1.50±0.05       | 0.80±0.10 | 8.0±0.10 | 4 |                  |
| TSEA160865 | 1.00±0.05       | 1.82±0.05       | 0.80±0.10 | 8.0±0.10 | 4 |                  |
| TSEA160808 | 1.04±0.05       | 1.82±0.05       | 0.95±0.05 | 8.0±0.10 | 4 |                  |
| TSEA141265 | 1.50+0.10/-0.05 | 1.70+0.10/-0.05 | 0.80±0.10 | 8.0±0.10 | 4 |                  |
| TSEA141207 | 1.50+0.10/-0.05 | 1.70+0.10/-0.05 | 0.95±0.10 | 8.0±0.10 | 4 |                  |
| TSEA141208 | 1.50+0.10/-0.05 | 1.70+0.10/-0.05 | 0.95±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201265 | 1.40+0.10/-0.05 | 2.25+0.10/-0.05 | 0.80±0.10 | 8.0±0.10 | 4 | 3000             |
| TSEA201208 | 1.50±0.10       | 2.30±0.10       | 1.00±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201210 | 1.50±0.10       | 2.35±0.10       | 1.20±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201607 | 1.95±0.10       | 2.45±0.10       | 0.80±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201608 | 1.90±0.10       | 2.35±0.10       | 1.00±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201610 | 1.95±0.10       | 2.35±0.10       | 1.15±0.10 | 8.0±0.10 | 4 |                  |
| TSEA201612 | 1.90±0.10       | 2.30±0.10       | 1.35±0.10 | 8.0±0.10 | 4 |                  |
| TSEA252075 | 2.35+0.10/-0.05 | 2.80+0.10/-0.05 | 1.00±0.10 | 8.0±0.10 | 4 |                  |
| TSEA252008 | 2.35+0.10/-0.05 | 2.80+0.10/-0.05 | 1.00±0.10 | 8.0±0.10 | 4 |                  |
| TSEA252010 | 2.45±0.10       | 2.80±0.10       | 1.20±0.10 | 8.0±0.10 | 4 |                  |
| TSEA252012 | 2.35+0.10/-0.05 | 2.80+0.10/-0.05 | 1.35±0.10 | 8.0±0.10 | 4 |                  |

| 类型         | Ao              | Bo              | Ko        | W         | P | 数量<br>(Pcs/Reel) |
|------------|-----------------|-----------------|-----------|-----------|---|------------------|
| TSEA322510 | 2.80+0.10/-0.05 | 3.50+0.10/-0.05 | 1.15±0.10 | 8.0±0.10  | 4 | 3000             |
| TSEA322512 | 2.90+0.10/-0.05 | 3.50+0.10/-0.05 | 1.35±0.10 | 8.0±0.10  | 4 |                  |
| TSEA322520 | 2.90+0.10/-0.05 | 3.50+0.10/-0.05 | 2.20±0.10 | 8.0±0.10  | 4 | 2000             |
| TSEA303010 | 3.40±0.10       | 3.40±0.10       | 1.40±0.10 | 12.0±0.30 | 8 |                  |
| TSEA303012 | 3.40±0.10       | 3.40±0.10       | 1.40±0.10 | 12.0±0.30 | 8 | 3000             |
| TSEA303015 | 3.40±0.10       | 3.40±0.10       | 1.70±0.10 | 12.0±0.30 | 8 |                  |
| TSEA303018 | 3.25±0.10       | 3.25±0.10       | 2.00±0.10 | 12.0±0.30 | 8 |                  |
| TSEA303020 | 3.40±0.10       | 3.45±0.10       | 2.20±0.10 | 12.0±0.30 | 8 | 3000             |
| TSEA404010 | 4.40±0.10       | 4.40±0.10       | 1.15±0.10 | 12.0±0.30 | 8 |                  |
| TSEA404012 | 4.40±0.10       | 4.40±0.10       | 1.30±0.10 | 12.0±0.30 | 8 |                  |
| TSEA404015 | 4.40±0.10       | 4.40±0.10       | 1.70±0.10 | 12.0±0.30 | 8 |                  |
| TSEA404020 | 4.40±0.10       | 4.40±0.10       | 2.20±0.10 | 12.0±0.30 | 8 |                  |
| TSEA404030 | 4.40±0.10       | 4.40±0.10       | 3.10±0.10 | 12.0±0.30 | 8 |                  |

5、焊接/welding

• 焊接原材料 Soldering Materials

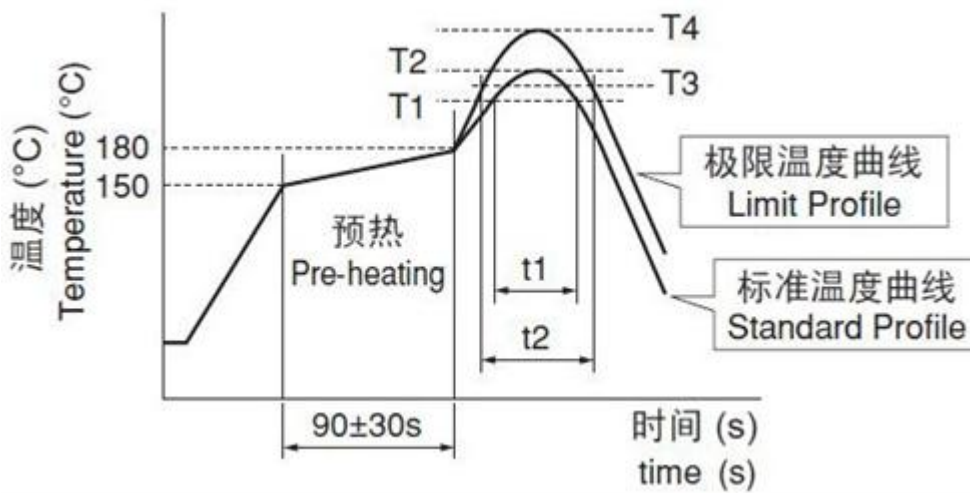
(a) 焊料 :推荐使用 96.5Sn/3.0Ag/0.5Cu 焊料 ,或者采用 Sn 含量不超过 97%的锡合金焊料。 Solder: It is recommended to use 96.5Sn/3.0Ag/0.5Cu solder, or use Tin alloy solder with a Tin content not exceeding 97%.

(b) 助焊剂 : 推荐使用松香类助焊剂, 请勿使用强酸性助焊剂 (含氯量超过 0.2wt %), 并且请勿使用水溶性助焊剂。

Flux: It is recommended to use rosin-based flux. Acidic flux (with chlorine content exceeding 0.2wt %) and water-soluble flux are forbidden.

• 焊接温度及要求 Soldering Temperature & Requirements

回流焊温度曲线 Reflow Soldering Temperature Profile



回流焊要求 Reflow Soldering Requirements

| 标准温度曲线Standard Profile |                          |                              |                               | 极限温度曲线Limit Profile   |                      |                              |                             |
|------------------------|--------------------------|------------------------------|-------------------------------|-----------------------|----------------------|------------------------------|-----------------------------|
| 加热Heating              |                          | 峰值温度<br>Peak Temp.<br>( T2 ) | 回流焊<br>次Cycle<br>Of<br>Reflow | 加热Heating             |                      | 峰值温度<br>Peak Temp.<br>( T4 ) | 回流焊次数<br>Cycle Of<br>Reflow |
| 加热<br>Temp.<br>( T1 )  | 时间<br>Ti<br>me<br>( t1 ) |                              |                               | 温度<br>Temp.<br>( T3 ) | 时间<br>Time<br>( t2 ) |                              |                             |
| 220°C                  | 30~60s                   | 245±3°C                      | ≤2                            | 230°C                 | ≤60s                 | 260°C/10s                    | 1                           |

6、其他

- ◆ 本产品为无铅, 请采用无铅环境作业
- ◆ Other: Our company's products are lead-free, please operate in a lead-free environment
- ◆ 由于页面限制, 更多资料请联系我司
- ◆ Due to page limitations, please contact our company for more information
- ◆ 在过载电流等不正常条件下, 本电感产品无自我保护功能。
- ◆ Under abnormal conditions such as overload current, this inductor product has no self-protection function.