

**重要提醒** (下列条件适用于 SMD 产品系列内的所有零件):

- 请参照技术手册中的建议设计电路板。
- 必须根据回流焊/波峰焊技术规范选择合格的焊料，严格控制焊接温度、时间。
- 焊接工艺会导致产品表面变色。
- 爬锡现象会导致内孔堵塞，因此通孔产品不适用波峰焊，建议采用回流焊。
- 所有产品应在出厂 12 个月内使用，超出有效期会影响可焊性。
- 必须在密封、干燥环境下保存。
- 零件与 PCB 的连接强度由产品、焊盘、焊接效果等因素综合决定
- 必须控制最大锁附扭力，防止元件和 PCB 受到机械破坏。
- 工作电流由 PCB、电缆接头、电缆横截面等因素综合决定。
- 手册中如有标注参考电流，零件使用材料为黄铜 **C3604(H59)**



### Cautions and Warnings:

The following conditions apply to all goods within the product series of Sinhoo PCB SMD

General:

All recommendations according to the general technical specifications of the data-sheet have to be complied with.

The responsibility for the applicability of customer specific products and use in a particular customer design is always within the authority of the customer. All technical specifications for standard products do also apply for customer specific products.

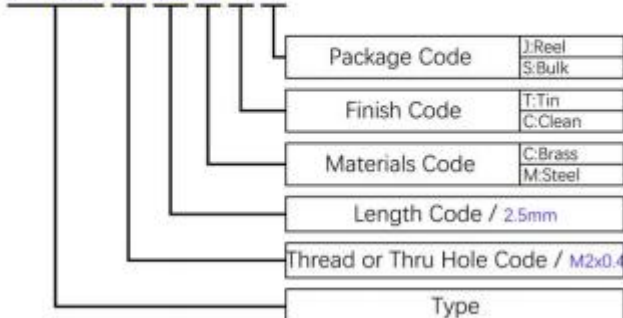
Product Specific:

Follow all instructions in the datasheet, especially:

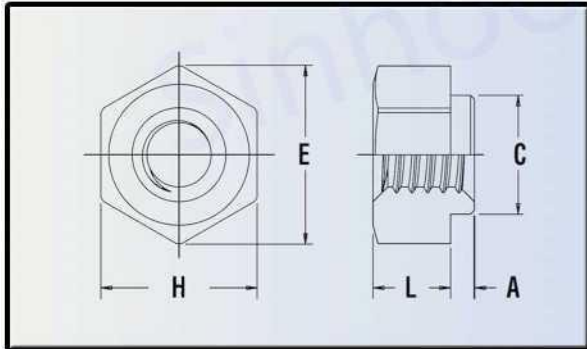
- The solder profile has to be complied with according to the technical reflow soldering specification, otherwise no warranty will be sustained.
- Surface discoloration due to reflow processing is permitted.
- Wave soldering is not applicable. Reflow soldering is recommended.
- All products shall be used before the end of the period of 12 months based on the product date-code, if not a 100% solderability can't be ensured.
- The maximum permissible torques must be complied with to prevent mechanical destruction of the elements and PCB.
- Operating current depends on PCB, cable lug and cross section of the cable.
- The connection strength between parts and PCB is determined by product, pad and welding effect
- If the operating current is marked in the manual, the material used for the parts is brass C3604(H59)

### PART NUMBER DESIGNATION

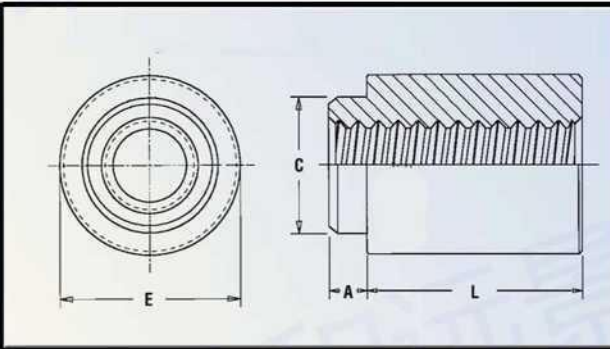
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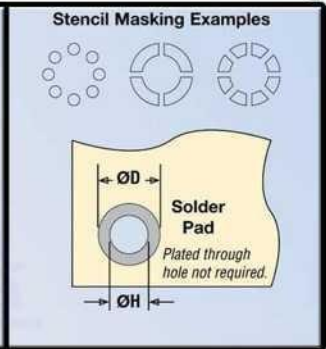
# PCB SMD NUT 电路板表贴螺母柱



Thread sizes 080, S1, S1.2, S1.4 and M1.6



Therad/thru hole sizes M2, M. 5, M3, M3. 5, M4, 3. 6, 4. 2



All dimensions are in millimeters.

Thread Size x Pitch	Thru Hole +0.10 -0.08	Type	Thread or Thru Hole Code	Length Code "L" ±0.13 (Length code in millimeters)																Min. Sheet Thickness	Max. A	C	Ref. ±0.13	H Nom	Hole Size In Sheet +0.08	ØD Min. Solder Pad	Rated Current (A)	Tightening Torque (Kgf.cm)									
				0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9										10	11	12	13	15	18	20	25	30
M 1x0.25	—	SMTSO	10																									0.5	0.48	2.41	3.66	—	3.18	2.5	4.19	15	0.3
M1.2x0.25	—	SMTSO	12																									0.5	0.48	2.41	3.66	—	3.18	2.5	4.19	15	0.6
M1.4x0.3	—	SMTSO	14																									0.5	0.48	2.41	3.66	—	3.18	2.5	4.19	15	1
M1.6x0.35	—	SMTSO	16																									0.5	0.48	2.41	3.66	—	3.18	2.5	4.19	15	1.5
M2x0.4	—	SMTSO	20																									1.53	1.53	3.6	—	5.56	—	3.73	6.2	30	1.5
M2.5x0.45	—	SMTSO	25																									1.53	1.53	4.09	—	5.56	—	4.22	6.2	30	3
M3x0.5	—	SMTSO	30																									1.53	1.53	4.09	—	5.56	—	4.22	6.2	30	5
M3.5x0.6	—	SMTSO	35																									1.53	1.53	5.28	—	7.14	—	5.41	7.77	40	6
M4x0.7	—	SMTSO	40																									1.53	1.53	6.22	—	8.74	—	6.35	9.37	50	8
— 3.2	SMTSO	32																										1.53	1.53	4.09	—	5.56	—	4.22	6.2	20	—
— 3.6	SMTSO	36																										1.53	1.53	5.28	—	7.14	—	5.41	7.77	30	—
— 4.2	SMTSO	42																										1.53	1.53	6.22	—	8.74	—	6.35	9.37	40	—

\*更多“L”尺寸未列在表中，请略我们确认！ MORE “L” SIZES ARE NOT LISTED IN THE TABLE, PLEASE CONTACT US FOR CONFIRMATIO

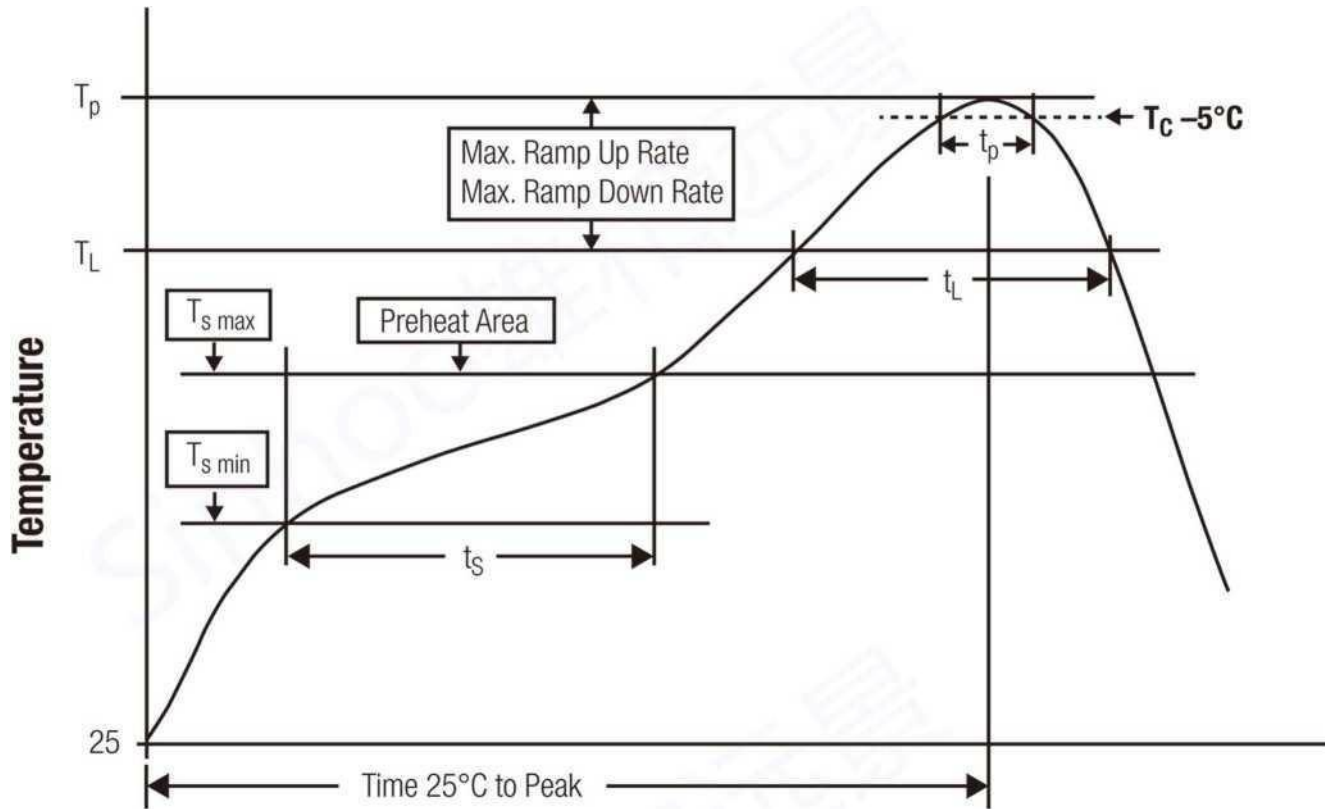
Thread sizes 080, S1, S1.2, S1.4 and M1.6

Therad/thru hole sizes M2, M. 5, M3, M3. 5, M4, 3. 6, 4. 2

2-56, 4-40, 6-32, 8-32, 116 and 143

All dimensions are in inches.

Thread Size	Thru Hole +.004 -.003	Type	Thread or Thru Hole Code	Length Code "L" ±.005 (Length code in 32nds of an inch)						Min. Sheet Thickness	Max. A	C	E		H Nom.	ØH Hole Size In Sheet +.003-.000	ØD Min. Solder Pad	Rated Current (A)	Tightening Torque (Kgf.cm)
				Ref.	±.005														
.060-80 (#0-80)	—	SMTSO	080	.062	.125	—	—	—	—	.020	.019	.095	.144	—	.125	.098	.165	15	1.5
.086-56 (#2-56)	—	SMTSO	256	.062	.125	.187	.250	.312	.375	.060	.060	.142	—	.219	—	.147	.244	30	1.5
.112-40 (#4-40)	—	SMTSO	440	.062	.125	.187	.250	.312	.375	.060	.060	.161	—	.219	—	.166	.244	30	5
.060-80 (#6-32)	—	SMTSO	632	.062	.125	.187	.250	.312	.375	.060	.060	.208	—	.281	—	.213	.306	40	6
.164-32 (#8-32)	—	SMTSO	832	.062	.125	.187	.250	.312	.375	.060	.060	.245	—	.344	—	.250	.369	50	8
—	.116	SMTSO	116	.062	.125	.187	.250	.312	.375	.060	.060	.161	—	.219	—	.166	.244	30	—
—	.143	SMTSO	143	.062	.125	.187	.250	.312	.375	.060	.060	.208	—	.281	—	.213	.306	40	—



### Classification Reflow Profile for SMT components:

#### Classification Reflow Soldering Profile:

Profile Feature		Value
Preheat Temperature Min ( $T_{s \text{ min}}$ )	$L_{\text{min}}$	$150^\circ\text{C}$
Preheat Temperature Max ( $T_{s \text{ max}}$ )	$T_{s \text{ max}}$	$200^\circ\text{C}$
Preheat Time $t_s$ from $T_{s \text{ min}}$ to $T_{s \text{ max}}$	$t_s$	60-120 seconds
Ramp-up Rate ( $T_L$ to $T_p$ )		$3^\circ\text{C}/\text{second max.}$
Liquidous Temperature ( $T_L$ )	$T_L$	$217^\circ\text{C}$
Time $t_L$ maintained above $T_L$	$t_L$	60-150 seconds
Peak package body temperature		see table
Time within $5^\circ\text{C}$ of actual peak temperature	$t_p$	20 - 30 seconds
Ramp-down Rate ( $T_L$ to $T_p$ )		$6^\circ\text{C}/\text{second max.}$
Time $25^\circ\text{C}$ to peak temperature		8 minutes max.

#### Package Classification Reflow Temperature:

##### Time

Properties	Volume $\text{mm}^3$ <350	Volume $\text{mm}^3$ 350-2000	Volume $\text{mm}^3$ >2000
PB-Free Assembly I Package Thickness < 1.6 mm	$260^\circ\text{C}$	$260^\circ\text{C}$	$260^\circ\text{C}$
PB-Free Assembly I Package Thickness 1.6 mm - 2.5 mm	$260^\circ\text{C}$	$250^\circ\text{C}$	$245^\circ\text{C}$
PB-Free Assembly I Package Thickness > 2.5 mm	$250^\circ\text{C}$	$245^\circ\text{C}$	$245^\circ\text{C}$