

REACH & RoHS
COMPLIANT

introduction

- ROHS, Halogen Free and REACH compliance
- High rated current
- 125℃ maximum total temperature operation
- 7.3×6.8×1.8mm maximum surface mount package
- Low core loss
- Ultra low buzz noise due to molding construction

Applications

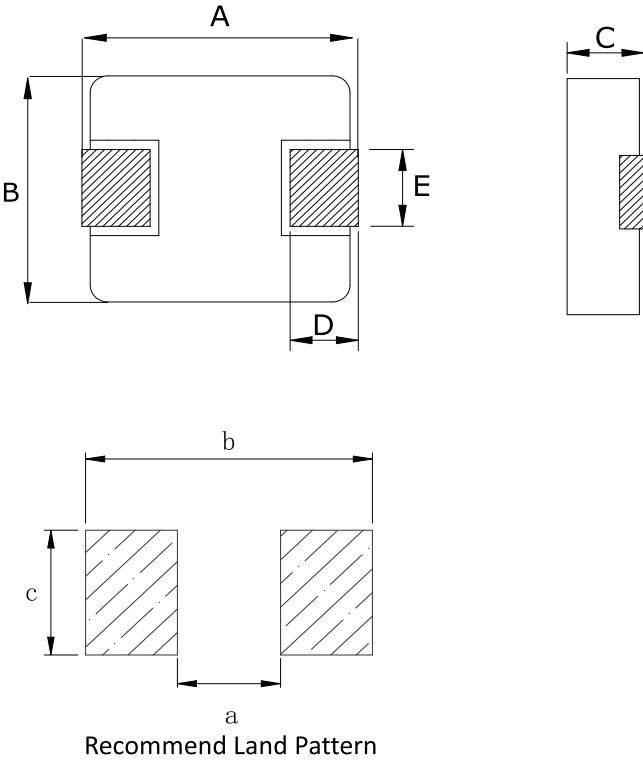
- Laptops and PCs
- Switch and servers
- Base stations
- DC/DC converters
- Battery powered devices
- SSD modules

Product Identification

YTA 0618 --6R8 M
① ② ③ ④

- ① YTA ----- Series name
② 0618 ----- Dimension
③ 6R8 ----- Inductance Value (6R8 = 6.8μH)
④ M -----Inductance Tolerance (M= ± 20%)

Dimensions-mm



A	B	C	D	E	a typ	b typ	c typ
7.0±0.3	6.6±0.2	1.6±0.2	1.6±0.3	3.0±0.3	3.7	8.4	3.5

VOOHU 苏州沃虎电子科技有限公司
Su Zhou Voohu Electronic Tech.Co.Ltd

TEL: +86 400 1048 018

WEB: WWW.WOHU-TEK.COM

TITLE:
YTA0618 Series

PART NO.:
YTA0618系列规格书

REMARK:

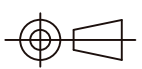
SIZE
A4

SACLE
1:1

SHEET
1/7

UNITS
MM[INCH]

REV
A0



GENERAL TOLERANCES
UNLESS SPECIFIED

x±0.35	x°±3.0°
.x±0.30	.x°±2.0°
.xx±0.25	.xx°±1.5°
.xxx±0.10	.xxx°±1.0°

APPROVED BY:
Geoffrey.Song

CHECKED BY:
Elvis.Song

DESIGND BY:
Sunny.Xu

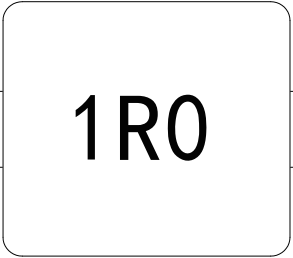
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Marking

The inductor is marked with a 3-digit code

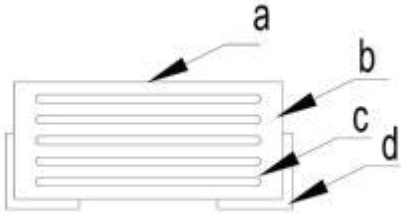
Nominal Inductance	
Example	Nominal Value
1R0	1.0 μ H
100	10 μ H
101	100 μ H

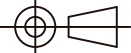
Note : Using Ink for marking



Structure and Components

Symbol	Components	Material
a	MARKING	Ink (black)
b	CORE	Alloy Sponge Powder
c	WIRE	Polyurethane copper wire
d	Terminal	Copper plated with Sn



A	 苏州沃虎电子科技有限公司 Su Zhou Voohu Electronic Tech.Co.Ltd		TITLE: YTA0618 Series	SIZE A4	UNITS MM[INCH]	GENERAL TOLERANCES UNLESS SPECIFIED		APPROVED BY: Geoffrey.Song
			PART NO.: YTA0618系列规格书	SACLE 1:1	REV A0	x $\pm$ 0.35 .x $\pm$ 0.30	x $^{\circ}$ $\pm$ 3.0 $^{\circ}$.x $^{\circ}$ $\pm$ 2.0 $^{\circ}$	CHECKED BY: Elvis.Song
	TEL: +86 400 1048 018	WEB: WWW.WOHU-TEK.COM	REMARK:	SHEET 2/7		.xx $\pm$ 0.25 .xxx $\pm$ 0.10	.xx $^{\circ}$ $\pm$ 1.5 $^{\circ}$.xxx $^{\circ}$ $\pm$ 1.0 $^{\circ}$	DESIGND BY: Sunny.Xu

1	2	3	4	5	6	7	8
REACH & RoHS COMPLIANT							
		</					

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Mechanical Reliability

Item	Specification and Requirement	Test Method
Solderability	1. No case deformation or change in apperance 2. New solder coverage More than 95%	1.Preheat: 155℃±5℃ , 60S±2S 2.Tin: lead-free. 3.Temperature:240℃±5℃, flux 3.0S±0.5S.
Mechanical shock	1. No case deformation or change in apperance 2. $\Delta L/Lo \leq \pm 10\%$	1. Acceleration: 100G 2. Pulse time: 6ms 3. 3 times in each positive and negative direction of 3 mutual perpendicular directions
Mechanical vibration	1. No case deformation or change in apperance 2. $\Delta L/Lo \leq \pm 10\%$	1. Reflow: 2times 2. Frequency: 10HZ~55HZ~10HZ, 20 Min/Cycles 3. Amplitude: 1.52 mm 4. Directions: X,Y,Z 5. Time: 12 cycle / direction

Endurance Reliability

Item	Specification and Requirement	Test Method
Thermal Shock	Inductance change: Within $\pm 10\%$ Without distinct damage in appearance	1. First -55℃ for 30 minutes, last 125℃ for 30 minutes as 1 cycle. Go through 1000 cycles. 2. Max transfer time is 3 minutes. 3. Measured at room temperature after placing for 24±2 hours
Humidity Resistance	Inductance change: Within $\pm 10\%$ Without distinct damage in appearance	1.Reflow 2 times, 2.85℃,85%RH,1000 hours 3.Measured at room temperature after placing for 24±2 hours
Low temperature storage	Inductance change: Within $\pm 10\%$ Without distinct damage in appearance	1. Temperature: -55 $\pm 2^\circ\text{C}$ 2. Time: 1000 hours 3. Measured at room temperature after placing for 24±2 hours
High temperature storage	Inductance change: Within $\pm 10\%$ Without distinct damage in appearance	1. Temperature: +125 $\pm 2^\circ\text{C}$ 2. Time: 1000 hours 3. Measured at room temperature after placing for 24±2 hours

Recommended Soldering Technologies

(1)Re-flowing Profile

Preheat condition: 150 ~200℃/60~180sec.

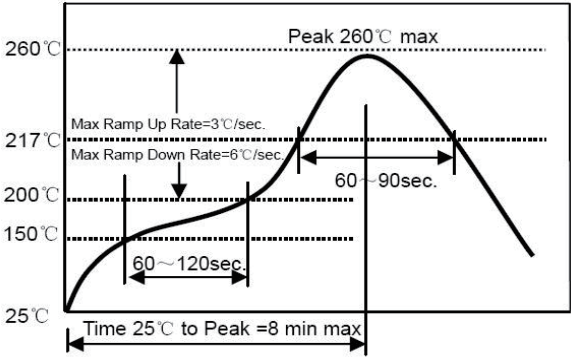
Allowed time above 217℃: 80~120sec.

Max temp: 260℃

Max time at max temp: 10 sec.

Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2x max



(2)Iron Soldering Profile

Iron soldering power: Max. 30W

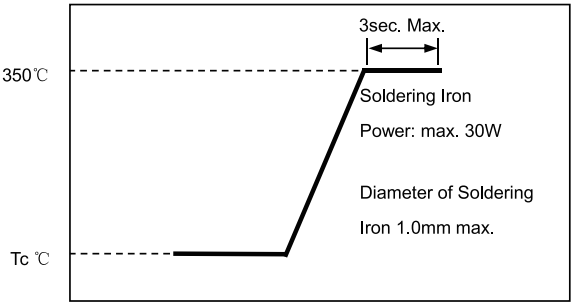
Pre-heating: 150℃/60sec.

Soldering Tip temperature: 350℃ Max.

Soldering time: 3sec. Max.

Solder paste: Sn/3.0Ag/0.5Cu

Max.1 times for iron soldering



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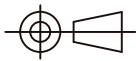
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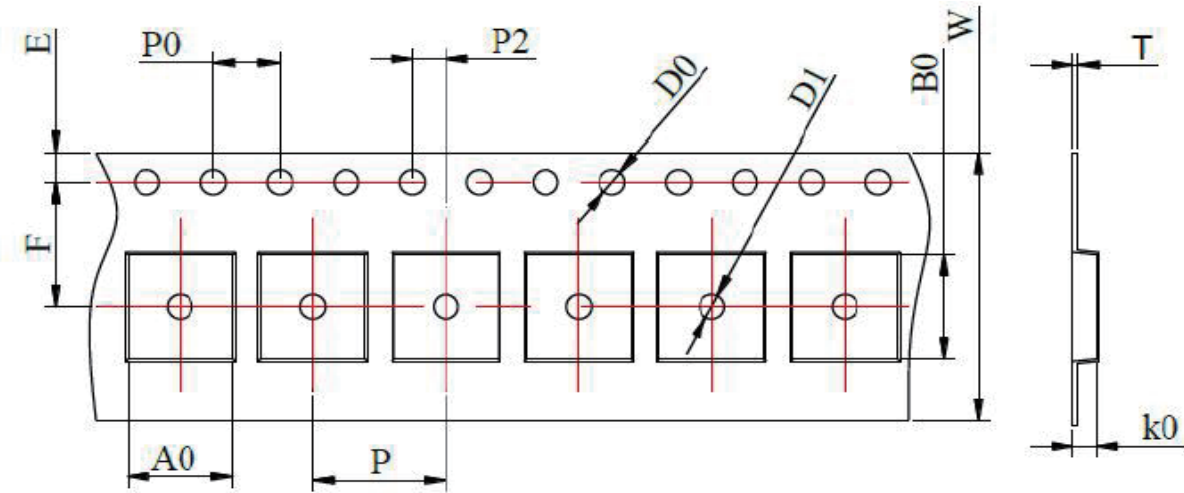
APPROVED BY:
Geoffrey.Song

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Elvis.Song

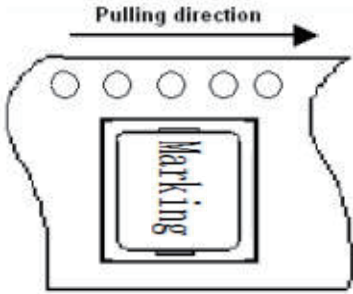
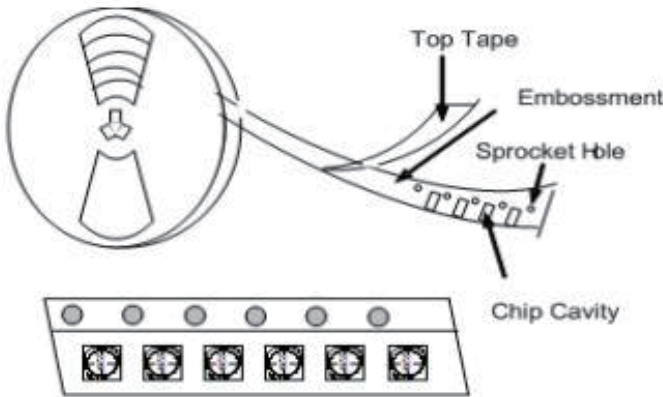
DESIGND BY:
Sunny.Xu

2
Packaging Information

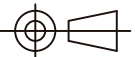
(1) Tape Packaging Dimensions (Unit: mm)



Taping Drawings (UNIT:mm)

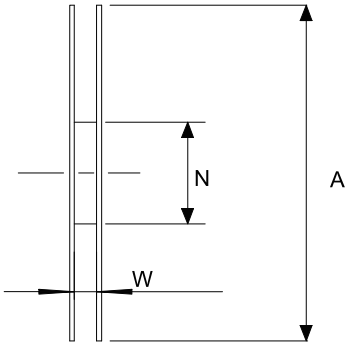
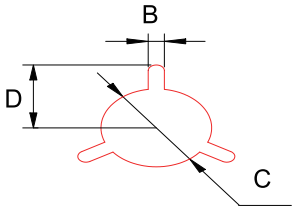
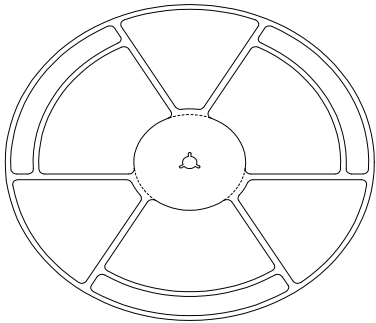


Type	Tape dimensions (mm)											
	W	P	P0	P2	D0	D1	T	A0	B0	K0	E	F
WHYTA0618	16 ±0.3	12 ±0.1	4 ±0.1	2 ±0.1	1.5 ±0.1	1.5 ±0.1	0.35 ±0.05	6.9 ±0.1	7.5 ±0.1	2.1 ±0.1	1.75 ±0.1	7.5 ±0.1



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(2) Reel Dimensions (Unit: mm)



A	W	N	B	C	D
330+2.0	16.8+0.2	97+0.5	2.2+0.5	13.2±0.2	10.75±0.25

(3) Packaging Quantity(PCS)

Type	Standard Quantity		
	Reel	Inner box	Carton box
WHYTA0618	2000 pcs / reel	3Reel / box (6000 pcs)	4 Middle boxes, (24000 pcs)

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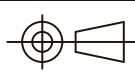
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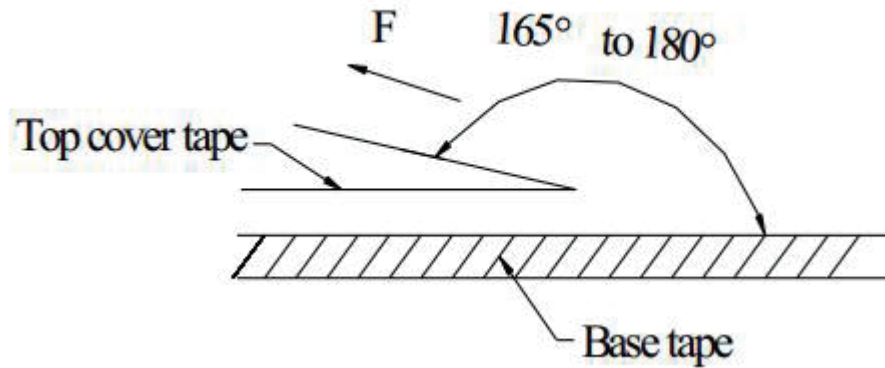
DESIGND BY:
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(4) Peel force of top cover tape

The peel speed shall be about 300mm/minute

The peel force of top cover tape shall be between 0.1 to 1.3 N



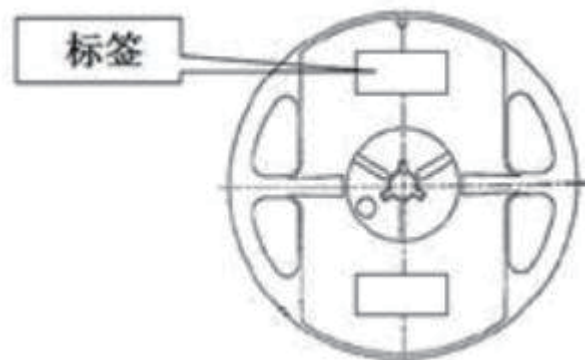
(5) Reel Label

Label on the reel

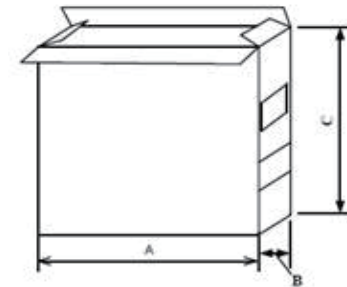
- Customer's part Number
- Lot Number
- Quantity
- date code

Shipping Label

- Customer's part Number
- Manufacturer's part Number
- Quantity
- date code

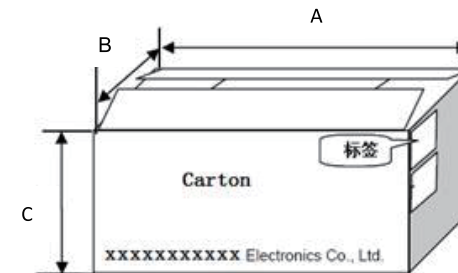


(6) Inner Box



Packaging type	A (mm)	B (mm)	C (mm)
Inner box	335	70	340

(7) Carton



Packaging type	A (mm)	B (mm)	B (mm)
type	360	360	360

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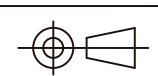
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