Product Series :	GSTH	Brand :	GOTREND
File Version :	GSTH-SERIES	Editor :	Yinghui Guo
Established Date	2023.05.31	Description :	High Current Inductor
Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize

# **Version Information:**

SN	Date	Version Code	Modify Description	Editior	Check 7 oby Zhang
01	2024.11.07	V1R0	New version update release	Yinghui Guo	7oby Zhang



Product Series :	GSTH	Brand :	GOTREND		
File Version :	GSTH-SERIES	Editor :	Yinghui Guo		
Established Date	2023.05.31	Description :	High Current Inductor		
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# ! REMINDERS

- Product information in this catalog is subject to change without notice, and is for reference only. Therefore, please contact GOTREND
  Technology to check for the latest information before practical application or usage of the products.
- ♦ This catalog contains only typical specifications, please contact GOTREND Technology for further details if you can not find special components or information you need in this catalogue. Please also approve our product specifications or transact the approval sheet for product specifications before ordering.
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- Products listed in this catalog are intended for general electronic device usage under normal operation and use condition including telecommunication equipment, home appliances, sports equipment AV equipment, industrial machine, office equipment etc. Please take note that our products are not designed, intended or authorized for use in below mentioned applications unless explicitly agreed in writing between the parties to avoid product failure that could result in situation where personal injury or death could occur.
  - (1) Aerospace/Aviation equipment
  - (2) Atomic energy-related equipment
  - (3) Disaster prevention/crime prevention equipment
  - (4) Electric heating apparatus, burning equipment
  - (5) Medical equipment
  - (6) Military equipment
  - (7) Power-generation control equipment
  - (8) Public information-processing equipment
  - (9) Safety equipment
  - (10) Seabed equipment
  - (11) Transportation control equipment
  - (12) Transportation equipment (cars, electric trains, ships, etc.)
  - (13) Other applications that are not considered general-purpose applications
- Our manufacturing sites fully compliance with requirement regarding the quality management system in the automotive industry under the IATF 16949 standard. GOTREND Technology respect individual agreements with reference to customer requirements and customer specific requirements (CSR). We will like to emphasize that only requirements mutually agreed upon will in implemented in our Quality Management System taking into consideration that IATF 16949 may appear to support the acceptance of unilateral requirements. We will only legally bind to this individually agreed upon agreement under the IATF 16949 standard.
- The product itself is a powder metallurgy product, so the structure is relatively fragile, and it should not be used for products that are easy to fall. In addition, when this product is assembled, it should avoid collision with the tool or mechanism shell.



• It is not recommended to use hot air gun for disassembling of this product. When using of hot air gun to repair other parts, please also take note that long time or high temperature exposure of this product will also damage the inductance device. If you need to use the hot air gun to disassemble the product, it is recommended to adjust the hot air gun temperature to 380 deg.C±5 deg.C. The blower head of the hot air gun should be perpendicular and at least 1cm away from the product. After heating the product to the tin material melting point, use tweezers to remove the product from the PCB.





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#### Features & Application:

- \* High performance ( lsat ) realized by metal dust core.
- \* Low loss realized with low DCR
- \* Capable of corresponing high frequency
- \* 100% lead ( Pb ) free meet RoHS standard
- \* DC / DC converter for CPU in Notebook PC

#### Part No. Example:



Turne Office October 4004

2 : Type Size Code : 4021 = 4.2 x 4.1 x 1.9 mm

3 : P = Pb free < 1000 ppm</li>4 : [L]: Material Code

5 : Inductance Value : 4R7 = 4.7 uH

6 : Tolerance : M = +/-20%

# RHZ



(Picture for reference only)

#### **Basic Information:**

Made in	Taiwan / China
Pin Foot	SMD
Shielding	Yes
J-STD-020	MSL Level 1
RoHS	Compliant
REACH	Compliant
Halogen	Free

#### **Operating & Storage Condition:**

\* Operating Temp  $-40 \sim +125$  °C ( Including self - temperature rise ) \* Storage Temp  $1. -10 \sim +45$  °C ,  $50 \sim 60\%$  RH ( Product with taping )

2.  $-40 \sim +125 \,^{\circ}\text{C}$  ( On board )

\* Storage Life Time  $\,$  6 Month ( Less than 40  $^{\circ}\mathrm{C}$  and 60  $^{\circ}\mathrm{RH}$  )

# Attention & Caution :

\* Keep out of Splashing water or salt water

\* Avoid Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
Vibrations or shocks which exceed the specified condition

1

Dew condense

Layout near the edge of PCB

Over flexure after SMT mounting & PCBA

- \* Pin foot or SMD pad solderablility: Pb free type is best within 6 months after delivery
- \* Humidity sensitive, IPC/JEDEC J-STD-020 MSL if over Level 1, recommend bake 30mins@150 degree before PCBA
- \* Caution for human life relative applications : PLS contact & consult with GOTREND team in design stage.

#### **Test Condition:**

\* Equipment HP4284A , HP42841A - L , Q , DCR , IDC

HP8753D Network analyzer - SRF

\* Standard Atmosphere Conditions:

Ambient Temperature 20  $\pm$  15 °C Humidity RH 65  $\pm$  20%

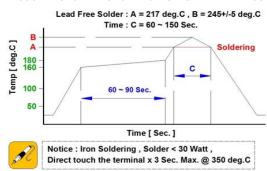
\* If there may be any doubt on the test result ,

Measurement shall be made within the following limits:

Ambient Temperature 25 ± 5 °C

Humidity RH 75 ± 10%

# Recommend IR Reflow Curve : GTX-IR-FILE001





**Product Series: GSTH** Brand: GOTREND File Version: Editor: Yinghui Guo **GSTH-SERIES Established Date** 2023.05.31 **Description:** High Current Inductor Latest Edit Date: 2024.11.07 **Product Type:** ☑ Standard  $\square$  Customize

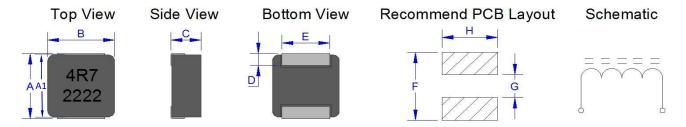
High Current Inducto	or - GSTH	l Series	Туре					
Part Name	L ( mm ) Typ.	W (mm) Typ.	H ( mm ) Typ.	Inductance Range ( uH ) M=+/-20%	DCR ( m Ohm ) Typ.	Irms ( A ) Typ.	Isat ( A ) Typ.	Page
GSTH4021PL	4.2	4.1	1.9	0.10 ~ 10.00	1.6 ~ 115.0	2.8 ~ 24.0	2.7 ~ 26.0	5~7
GSTH4021P	4.3	4.2	1.9	0.10 ~ 10.00	1.9 ~ 126.0	3.1 ~ 19.0	3.3 ~ 35.0	8~10
GSTH5030PL	5.6	5.2	2.8	0.47 ~ 22.00	3.1 ~ 111.0	3.6 ~ 18.0	2.2 ~ 14.0	11~13
GSTH5030P	5.7	5.3	2.8	0.24 ~ 10.00	2.5 ~ 65.0	5.0 ~ 25.0	6.8 ~ 33.0	14~16



Product Series :	GSTH	Brand :	GOTREND
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#### **GSTH4021PL-SERIES**

# Dimension [ mm ]:



Marking: A. Inductance code & Date code

(1) Year ex. 2022 = 22

(2) Weekly serial number 01 ~ 52

Size Code	A (+/-0.3)	A1 (+/-0.3)	B (+/-0.2)	C (+/-0.2)	D (+/-0.3)	E (+/-0.2)	F (Ref.)
	4.2	4.0	4.1	1.9	0.8	3.0	5.2
4021PL	G (Ref.)	H (Ref.)					
	2.2	3.5					

#### **Electrical Characteristics:**

Part No.	Inductance (uH)	Inductance Tolerance	DCR ( m Ohm )		lsat ( A )		Irms (A)	
	( 411 )	roloranoc	Тур.	Max.	Тур.	Max.	Тур.	Max.
GSTH4021PL-R10M	0.10	M	1.6	2.0	26.0	23.0	24.0	22.0
GSTH4021PL-R15M	0.15	M	2.9	3.5	22.0	20.0	18.0	16.0
GSTH4021PL-R22M	0.22	M	4.1	4.9	16.0	13.0	16.0	14.0
GSTH4021PL-R33M	0.33	M	4.8	5.8	13.5	11.5	15.0	13.0
GSTH4021PL-R47M	0.47	M	6.0	7.0	11.0	9.5	13.0	11.0
GSTH4021PL-R68M	0.68	M	7.6	8.8	9.5	8.2	11.0	10.0
GSTH4021PL-1R0M	1.00	M	9.5	11.0	8.0	7.0	10.0	9.5
GSTH4021PL-1R5M	1.50	M	14.0	16.0	6.8	6.2	8.5	7.8
GSTH4021PL-2R2M	2.20	M	20.9	23.0	5.5	4.8	7.5	6.8
GSTH4021PL-3R3M	3.30	M	38.0	45.6	5.0	4.4	5.6	5.2
GSTH4021PL-4R7M	4.70	M	54.0	64.8	4.2	3.7	4.5	4.0
GSTH4021PL-5R6M	5.60	M	63.0	75.6	3.5	3.1	4.1	3.6
GSTH4021PL-6R8M	6.80	M	80.5	92.5	3.1	2.8	3.5	3.0
GSTH4021PL-8R2M	8.20	M	103.0	118.5	2.9	2.6	3.2	2.8
GSTH4021PL-100M	10.00	M	115.0	132.0	2.7	2.4	2.8	2.5

\* Test Condition : @100KHz , 1.0Vrms , 25°C Ambient

\* Inductance Tolerance : M = +/-20%

\* Irms: Rated Current Loading when temperature rise approximately 40°C

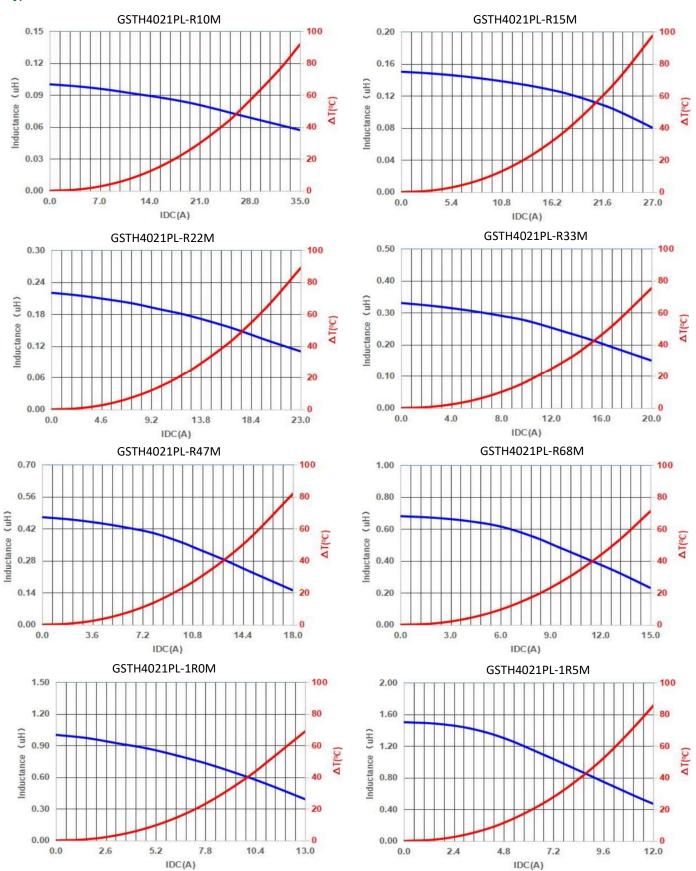
\* Isat : Saturated Current measured at the point of L drop approximately 30%

- \* The part temperature (ambient + temp rise): Should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- \* Irms Testing: Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
- \* Rated DC current: The lower value of Irms and Isat.



GOTREND **Product Series: GSTH** Brand: Yinghui Guo File Version: **GSTH-SERIES** Editor: **Established Date** 2023.05.31 **Description: High Current Inductor** Latest Edit Date: 2024.11.07 **Product Type:** ☑ Standard ☐ Customize

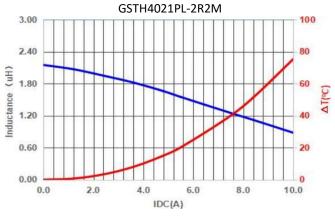
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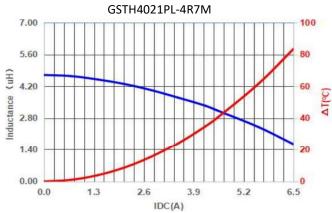


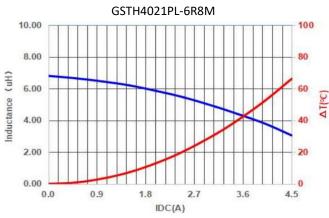


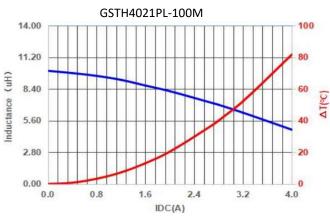
GOTREND **Product Series: GSTH** Brand: Editor: Yinghui Guo File Version: **GSTH-SERIES Established Date** 2023.05.31 **Description: High Current Inductor Product Type:** Latest Edit Date: 2024.11.07 ☑ Standard ☐ Customize

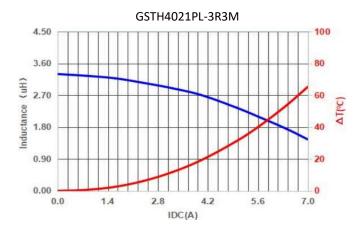
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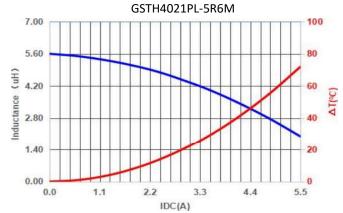


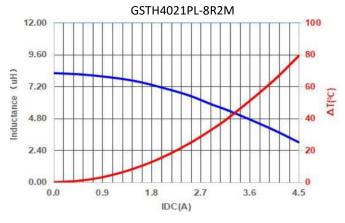








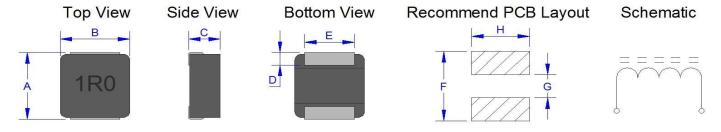




Product Series :	GSTH	Brand :	GOTREND			
File Version :	GSTH-SERIES	Editor :	Yinghui Guo			
Established Date	2023.05.31	Description :	High Current Inductor			
Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize			

#### **GSTH4021P-SERIES**

# Dimension [ mm ] :



# Marking: Inductance code

Size Code	A (+/-0.3)	B (+/-0.2)	C (+/-0.2)	D (+/-0.3)	E (+/-0.2)	F (Ref.)	G (Ref.)
	4.3	4.2	1.9	0.8	3.0	5.2	2.2
4021P	H (Ref.)						
	3.5						

# **Electrical Characteristics:**

Part No.	Inductance ( uH )	Inductance Tolerance	DCR ( m Ohm )		lsat ( A )		Irms (A)	
	( 411 )	roloranoc	Тур.	Max.	Тур.	Max.	Тур.	Max.
GSTH4021P-R10M	0.10	M	1.9	2.3	35.0	32.0	19.0	18.0
GSTH4021P-R15M	0.15	M	3.1	3.8	29.0	26.0	16.5	15.0
GSTH4021P-R33M	0.33	M	5.0	5.8	15.0	13.0	15.0	13.0
GSTH4021P-R47M	0.47	M	6.0	7.2	13.0	11.0	13.0	11.0
GSTH4021P-R68M	0.68	M	8.2	9.9	11.0	10.0	11.0	10.0
GSTH4021P-1R0M	1.00	M	11.5	13.8	10.0	9.5	10.0	9.5
GSTH4021P-1R5M	1.50	M	15.4	18.5	9.0	8.0	9.0	8.0
GSTH4021P-2R2M	2.20	M	25.0	30.0	7.2	6.5	7.2	6.5
GSTH4021P-3R3M	3.30	M	41.0	49.2	6.9	6.2	5.5	5.0
GSTH4021P-4R7M	4.70	M	60.0	69.0	5.8	5.2	4.7	4.1
GSTH4021P-5R6M	5.60	M	68.0	78.2	4.3	3.7	4.1	3.5
GSTH4021P-6R8M	6.80	M	80.5	92.5	3.9	3.4	3.8	3.3
GSTH4021P-8R2M	8.20	M	105.0	121.0	3.5	3.1	3.3	3.0
GSTH4021P-100M	10.0	M	126.0	145.0	3.3	3.0	3.1	2.9

<sup>\*</sup> Test Condition: @100KHz, 1.0Vrms, 25°C Ambient



<sup>\*</sup> Inductance Tolerance : M = +/-20%

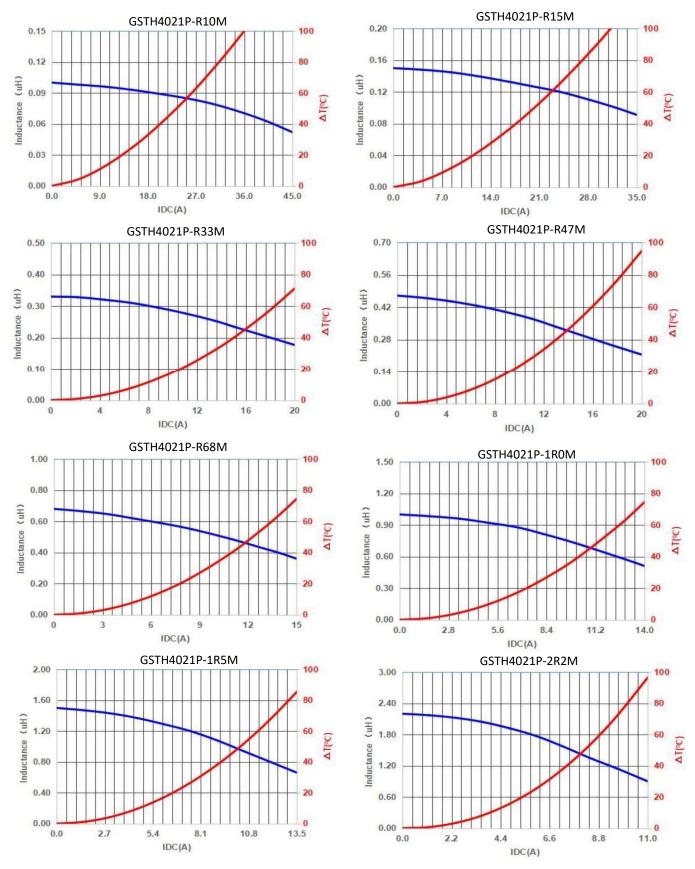
<sup>\*</sup> Irms: Rated Current Loading when temperature rise approximately 40°C

<sup>\*</sup> Isat: Saturated Current measured at the point of L drop approximately 30%

<sup>\*</sup> The part temperature (ambient + temp rise): Should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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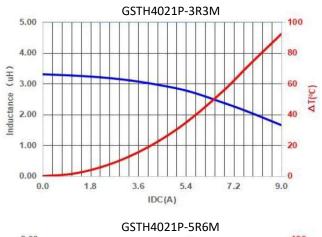
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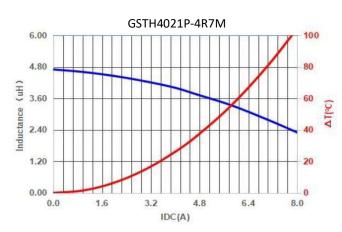


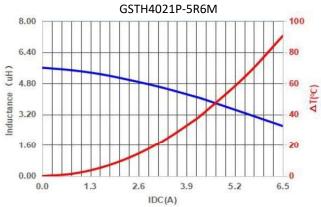


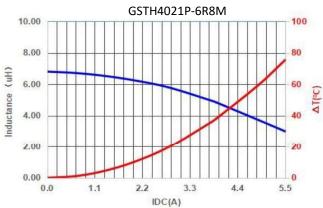
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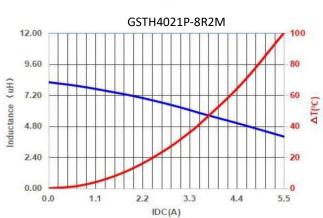
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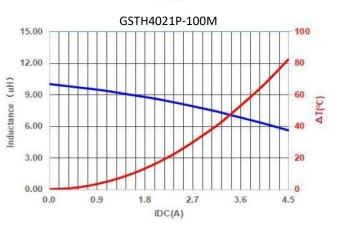








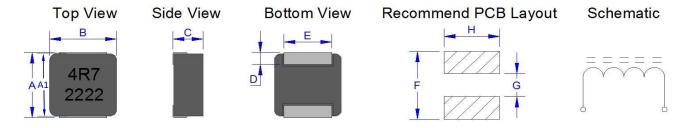




Product Series :	GSTH	Brand :	GOTREND
File Version :	GSTH-SERIES	Editor :	Yinghui Guo
Established Date	2023.05.31	Description :	High Current Inductor
Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize

#### **GSTH5030PL-SERIES**

# Dimension [ mm ]:



Marking: A. Inductance code & Date code

(1) Year ex. 2022 = 22

(2) Weekly serial number 01 ~ 52

Size Code	A (+/-0.3)	A1 (+/-0.3)	B (+/-0.2)	C (+/-0.2)	D (+/-0.3)	E (+/-0.3)	F (Ref.)
	5.6	5.1	5.2	2.8	1.3	3.0	6.5
5030PL	G (Ref.)	H (Ref.)					
	2.2	3.5					

#### **Electrical Characteristics:**

Part No.	Part No. Inductance Ir		DCR ( m Ohm )		Isat ( A )		Irms (A)	
			Тур.	Max.	Тур.	Max.	Тур.	Max.
GSTH5030PL-R47M	0.47	M	3.1	3.7	14.0	12.5	18.0	16.0
GSTH5030PL-R68M	0.68	M	3.7	4.3	11.5	10.5	15.0	13.0
GSTH5030PL-1R0M	1.00	M	5.6	6.7	11.0	10.5	14.0	12.5
GSTH5030PL-1R5M	1.50	M	8.3	10.0	10.5	9.5	13.0	12.0
GSTH5030PL-2R2M	2.20	M	12.0	14.4	8.5	7.5	10.5	9.5
GSTH5030PL-3R3M	3.30	M	16.0	19.2	7.5	6.5	8.5	8.0
GSTH5030PL-4R7M	4.70	M	26.0	31.2	6.5	5.5	7.0	6.6
GSTH5030PL-5R6M	5.60	M	33.0	39.6	6.1	5.2	6.5	5.8
GSTH5030PL-6R8M	6.80	M	36.0	43.2	5.9	5.0	6.3	5.4
GSTH5030PL-8R2M	8.20	M	46.0	55.2	5.5	4.7	5.8	5.1
GSTH5030PL-100M	10.00	M	58.0	69.6	5.0	4.2	5.2	4.6
GSTH5030PL-150M	15.00	M	90.0	108.0	2.6	2.2	4.1	3.6
GSTH5030PL-220M	22.00	M	111.0	133.2	2.2	1.9	3.6	3.3

<sup>\*</sup> Test Condition: @100KHz, 1.0Vrms, 25°C Ambient

\* Rated DC current: The lower value of Irms and Isat.



<sup>\*</sup> Inductance Tolerance : M = +/-20%

<sup>\*</sup> Irms: Rated Current Loading when temperature rise approximately 40°C

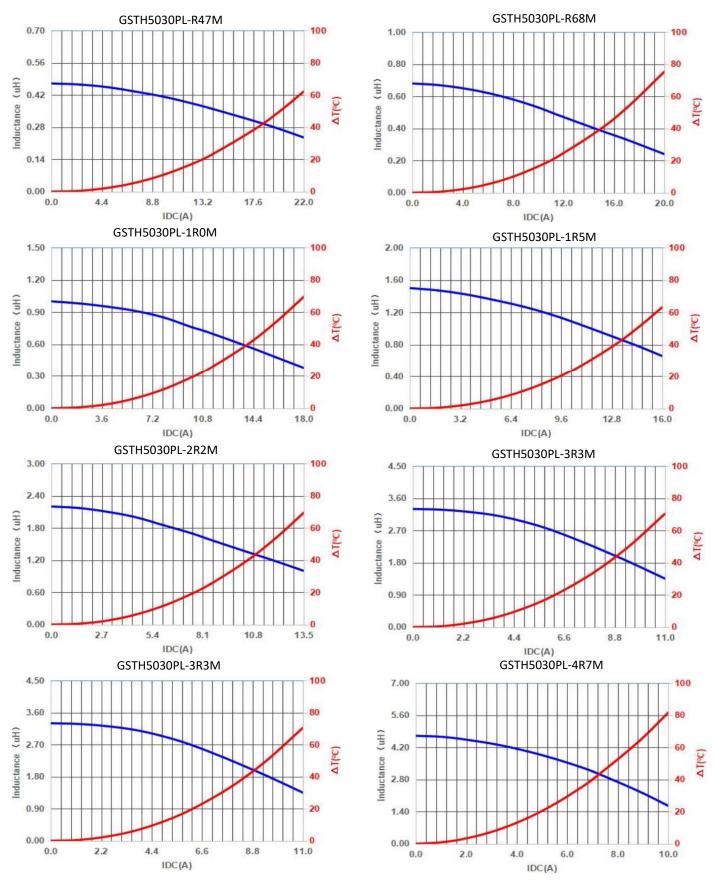
<sup>\*</sup> Isat: Saturated Current measured at the point of L drop approximately 30%

<sup>\*</sup> The part temperature (ambient + temp rise): Should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

<sup>\*</sup> Irms Testing: Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.

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Latest Edit Date :	2024 11 07	Product Type :	☑ Standard ☐ Customize

# **GSTH5030PL-SERIES**



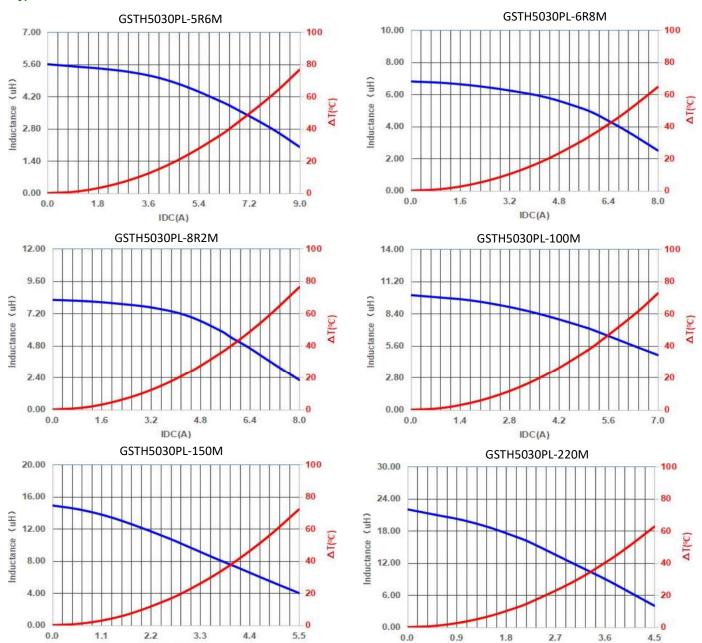


GOTREND **Product Series: GSTH** Brand: File Version: Editor: Yinghui Guo **GSTH-SERIES Established Date** 2023.05.31 **Description: High Current Inductor Product Type:** Latest Edit Date: 2024.11.07 ☑ Standard ☐ Customize

# **GSTH5030PL-SERIES**

# **Typical Performance Curves:**

IDC(A)



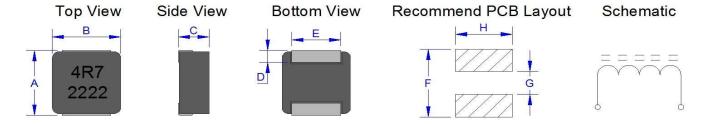


IDC(A)

Product Series :	GSTH	Brand :	GOTREND
File Version :	GSTH-SERIES	Editor :	Yinghui Guo
Established Date	2023.05.31	Description :	High Current Inductor
Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize

#### **GSTH5030P-SERIES**

# Dimension [ mm ]:



Marking: A. Inductance code & Date code

(1) Year ex. 2022 = 22

(2) Weekly serial number 01 ~ 52

Size Code	A (+/-0.3)	B (+/-0.2)	C (+/-0.2)	D (+/-0.3)	E (+/-0.3)	F (Ref.)	G (Ref.)
	5.7	5.3	2.8	1.2	3.0	6.5	2.2
5030P	H (Ref.)						
	3.5						

#### **Electrical Characteristics:**

Part No.	Inductance ( uH )	Inductance Tolerance	DCR ( m Ohm )		Isat ( A )		Irms ( A )	
	(un) Tolerance		Тур.	Max.	Тур.	Max.	Тур.	Max.
GSTH5030P-R24M	0.24	M	2.5	3.0	38.0	33.0	25.0	22.5
GSTH5030P-R33M	0.33	M	2.8	3.4	25.0	22.0	21.0	19.0
GSTH5030P-R36M	0.36	M	2.9	3.5	24.0	21.0	20.0	18.0
GSTH5030P-R47M	0.47	M	3.2	3.9	20.0	17.0	19.0	17.0
GSTH5030P-R68M	0.68	M	4.3	5.2	18.0	15.0	17.0	15.0
GSTH5030P-1R0M	1.00	M	5.6	6.7	16.0	13.5	15.0	13.0
GSTH5030P-1R2M	1.20	M	7.0	8.4	15.3	13.3	14.5	12.7
GSTH5030P-1R5M	1.50	M	8.3	10.0	15.0	13.0	14.0	12.5
GSTH5030P-2R2M	2.20	M	12.0	14.4	12.5	11.0	12.0	10.5
GSTH5030P-3R3M	3.30	M	17.5	21.0	10.5	9.0	10.0	9.0
GSTH5030P-4R7M	4.70	M	27.0	32.4	10.0	8.6	8.5	7.0
GSTH5030P-100M	10.0	M	65.0	78.0	6.8	6.0	5.0	4.5

\* Test Condition: @100KHz, 1.0Vrms, 25°C Ambient

\* Inductance Tolerance : M = +/-20%

\* Irms : Rated Current Loading when temperature rise approximately  $40^{\circ}\text{C}$ 

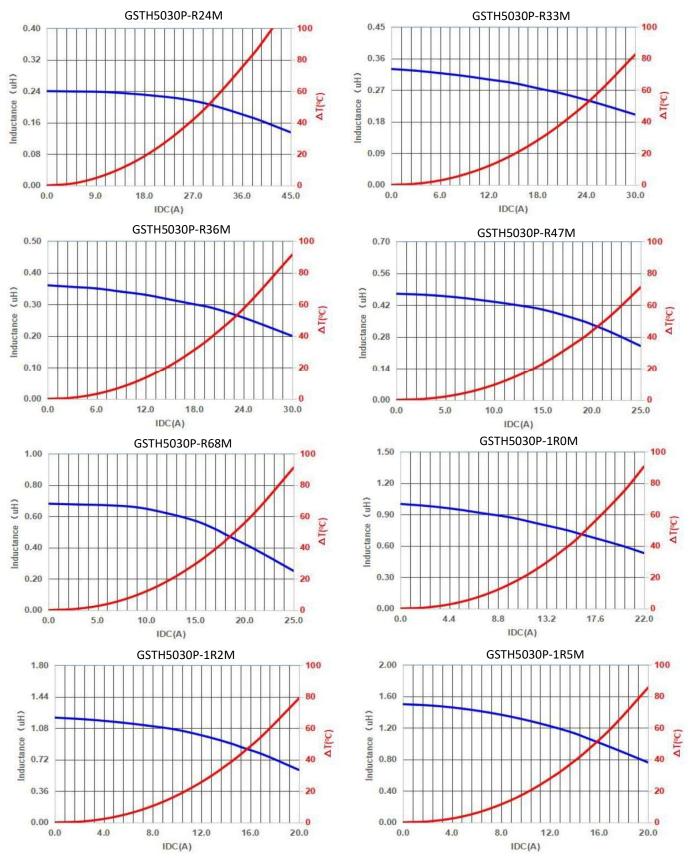
\* Isat: Saturated Current measured at the point of L drop approximately 30%

\* The part temperature (ambient + temp rise): Should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



Product Series :	GSTH	Brand :	GOTREND
File Version :	GSTH-SERIES	Editor :	Yinghui Guo
Established Date	2023.05.31	Description :	High Current Inductor
Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize

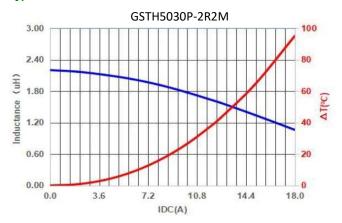
# **GSTH5030P-SERIES**

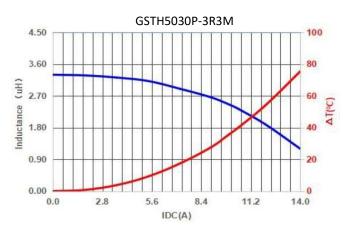


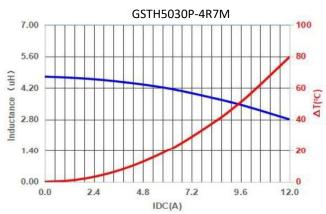


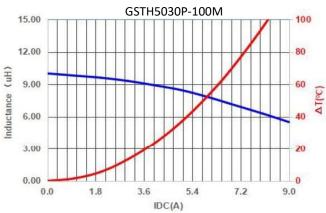
Product Series :	GSTH	Brand :	GOTREND
File Version :	GSTH-SERIES	Editor :	Yinghui Guo
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Latest Edit Date :	2024.11.07	Product Type :	☑ Standard ☐ Customize

# **GSTH5030P-SERIES**











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#### Care note:

#### Care note for Use:

#### (1) Storage Condition:

Temperature 25 to 35 °C, Humidity 45 to 60% RH

#### (2) Use Temperature:

- a. Minimum Temperature: -40 °C Ambient temperature of this product.
- b. Maximum Temperature: +125 °C The value of temperature including ambient and temperature rise of this product.
- c. Reliability test temperature range from -40 ~ +125 °C
- d. However, this is not meant as temperature grade guarantee for UL.

## (3) Model:

When this product was used in a similar or as new product to the original one, sometimes it might be unable to satisfy the specifications due to difference in condition of usage.

# (4) Drop:

If this product suffered mechanical stress such as drop, characteristics may become poor ( due to damage on coil / bobbin / ferrite ... etc. )

Never use such stressed product.

#### Care note for Safety:

#### (1) Provision to Abnormal Condition:

This product itself does not have any protective function in abnormal condition such as overload, short-circuit and open-circuit conditions, etc.

Therefore, it shall be confirmed from the end product that there is no risk of smoking, fire, dielectric withstand voltage insulation resistance, etc. in abnormal conditions to provide protective devices and /or protection circuit in the end product.

## (2) Temperature Rise:

Temperature rise on this product depends on the installation condition on end products.

It shall be confirmed on the actual end product that temperature rise of this product is within the specified temperature class limit.

# (3) Dielectric Strength:

Dielectric withstanding test with higher voltage than specific value will damage insulating material and shorten its life.

#### (4) Water:

This product must not be used in wet condition resulted from water, coffee or any liquid contact because insulation strength becomes very low under such condition.

#### (5) Potting:

If this product is potted in some compound, coating material of magnet wire might be occasionally damaged. Please ask us if you intend to pot this product.

## (6) Detergent:

Please consult our company immediately once under such circumstances because product reliability confirmation etc. is needed when this product come in contact with these chemicals.



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# Reliability:

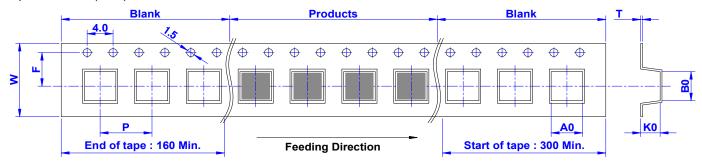
SN	Test Item		Test Condition		Specification
1	Dimension	Actual Size		Meet Spec	
2	Thermal Shock (Temperature Cycle)	Temperature : -4 Cycle : 100 Cycle	·0 ~ +125 deg.C kept stat es ( power off )	Elec. no variation Appearance no deformation	
3	Humidity Resistance	Humidity: 90% ~ Temperature: 60	95% RH 0 ± 2 deg.C, Test Time :	96 ± 2 Hours	Elec. no variation Appearance no deformation
4	HighTemperature	Temperature : 12 Testing Time : 9			Elec. no variation Appearance no deformation
5	Low Temperature	Temperature : -4 Time : 96 ± 2 Ho			Elec. no variation Appearance no deformation
6	Temperature and Humidity Cycle	Temperature 25 deg.C 55 deg.C 25 deg.C Cycle : 20 Cycle	Humidity 90% ~ 95% RH 95% ~ 96% RH 90% ~ 95% RH	Time 3.0 Hr 5.0 Hr 3.0 Hr	Elec. no variation Appearance no deformation
7	Vibration	Frequency: 10H	z ~ 55Hz, Amplitude : 1. Z, Time : 2 Hours each		Elec. no variation Appearance no deformation
8	Solderability	The profile like of Preheat: 160 ± 17 Peak: 245 ± 5 d	SMT IR-Reflow ur suggest profile. 10 deg.C ( 90 sec ) eg.C Gec. / up 217 deg.C	Elec. no variation Appearance no deformation	
9	Soldering Heat Resistance	Solder : Sn / Ag	10 deg.C ( 90 sec ) / Cu ( Pb Free ) 60 ± 5 deg.C, Time : 3 ±	: 1 seconds	Elec. no variation Appearance no deformation
10	Iron Solder Heat Resistance	Solder Temp. : 3 Flux : Rosin, Tir	50 ± 5 deg.C me : 3 ± 1 seconds		Elec. no variation Appearance no deformation
11	Bending Strength	Unit : mm	10 x 10 R:	Elec. no variation Appearance no deformation	
12	Flexure Strength	Unit : mm	10 x 20 4.5 - 4.5 - Solder cream 0.15 mr	Elec. no variation Appearance no deformation	
13	Terminal Strength	Mount on I Solder Cre	X Push 1 directi	Elec. no variation Appearance no deformation	
14	Load life	Temperature : 25 Load : Allowed D	5 ± 3 deg.C OC Current, Test Time : 9	96 ± 2 Hours	Elec. no variation Appearance no deformation



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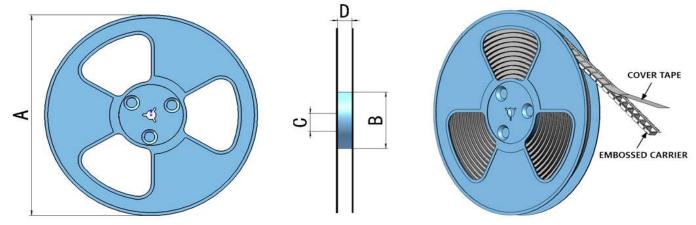
# **Packaging Information:**

# Tape Dimension ( mm ):



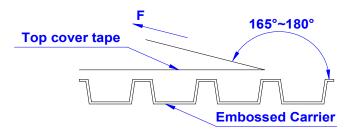
	SIZE/mm	W	Р	A0	В0	K0	Т	F
	4021PL	12.0	8.0	4.4	5.1	2.4	0.35	5.5
	4021P	12.0	8.0	4.6	4.9	2.3	0.35	5.5
Г	5030PL	12.0	8.0	5.7	6.5	3.3	0.35	5.5
	5030P	12.0	8.0	5.7	6.5	3.3	0.35	5.5

# Reel Dimension ( mm ):



SIZE/mm	REEL SIZE	А	В	С	D	QTY / REEL
4021PL	13" × 12 mm	330	100	13	12.4	3,000 PCS
4021P	13" × 12 mm	330	100	13	12.4	3,000 PCS
5030PL	13" × 12 mm	330	100	13	12.4	2,000 PCS
5030P	13" × 12 mm	330	100	13	12.4	2,000 PCS

# Tearing Off Force :



The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions ( referenced ANSI / EIA - 481 - D - 2008 of 4.11stadnard ).

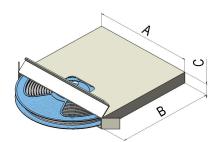
Room Temp.	Room Humidity	Room Atm.	Tearing Speed	
(°C)	(%)	( hPa )	( mm / min )	
5 ~ 35	45 ~ 85	860 ~ 1060	300	



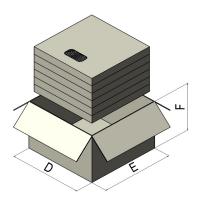
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# Packaging Information :

Box Package :



13' Small Box



13"Large Box

SIZE/mm	Rells size	Α	В	С	Large Box	D	Е	F	Reels in Small Box (QTY)	Small Box in Large Box(QTY)
4021PL	13"	335	335	40	13"	350	350	220	2(6,000)	5(30,000)
4021P	13"	335	335	40	13"	350	350	220	2(6,000)	5(30,000)
5030PL	13"	335	335	40	13"	350	350	220	2(4,000)	5(20,000)
5030P	13"	335	335	40	13"	350	350	220	2(4,000)	5(20,000)