



**SPECIFICATION FOR APPROVAL**

产品规格承认书

**High Current Power Inductor**

大电流功率电感

CUSTOMER.

MODEL NO.

MTP2918S系列

CUSTOMER'S PART NO.

LILE NO.

DATE.

2022.06.30

REVISION.

A/0

CUSTOMER APPROVE

DATE:

DRAWING

DRAWN BY	CHECK BY	APPROVAL BY

DATE: 2022.06.30



IATF16949 / ISO9001 / ISO14000

**深圳市迈翔科技有限公司**

SHENZHEN MOTTO TECHNOLOGY Co., Ltd

香港瑞德科技有限公司 黄冈市迈翔电子有限公司

Motto Technology park, niu e ling village no#214 xintian,nghua Town,  
Guanlan Street, Longhua District, Shenzhen

TEL: +86 0755-8948751~2 89487610 Fax: +86 0755-61624574

[Http://www.coilmx.com](http://www.coilmx.com) E-mail: [sales@mottotech.com](mailto:sales@mottotech.com)



CUSTOMER		MODEL NO.	MTP2918S系列	REVISION	A/0
FILE NO.		PART NO.		DATE	2022.06.30

1.PRODUCT DIMENSION		UNIT:mm	
	A	28MAX	
	B	27MAX	
	C	18.5±0.5	
	D	10±0.5	
	E	4.0±0.3	

2.ELECTRICAL REQUIREMENTS				
Part NO. 型号	Inductance(uH)电 感值±20%	DCR ( mΩ)MAX	Saturationcurrent(A) 饱和电流	Temperature risecurrent (A)温升电流
	100KHz/0.25V	AT25°C MICROTEST	100KHz/0.25V	100KHz/0.25V
MTP2918S-2R2M	2.2	2.5	100	30
MTP2918S-3R3M	3.3	2.5	93	30
MTP2918S-4R7M	4.7	2.5	63	30
MTP2918S-6R8M	6.8	2.5	46	30
MTP2918S-100M	10	2.5	31	30
MTP2918S-150M	15	2.5	21	30
MTP2918S-220M	22	2.5	14.0	30
MTP2918S-330M	33	2.5	8.7	30

**3.CHARACTERISTICS**

(1). All test data is based on 25°C ambient.

(2). DC current(A)that will cause an approximate ΔT40°C

(3). DC current(A)that will cause L0 to drop approximately 30%Typ

(4). Operating temperature range: -40°C~+125°C

(5).The part temperature (ambient + temp rise)should not exceed 125°C under worst case operating conditions. circuit design, component.PWB trace size and thickness,airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the den application

**4.SPECIAL REQUEST**

(1)Lettering XXXon top of the body.

<b>CUSTOMER</b>		<b>MODEL NO.</b>	MTP2918S系列	<b>REVISION</b>	A/0
<b>FILE NO.</b>		<b>PART NO.</b>		<b>DATE</b>	2022.06.30

**5.PRODUCT IDENTIFICATION**

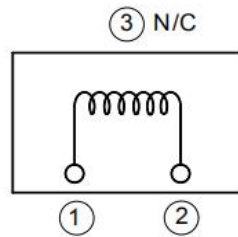
MTP 2918S - XXX M

① ② ③ ④

①、 Series name ②、 Product dimensions ③、 Inductance

④、 Tolerance: M±20%, N±30%.

**6.ELECTRICAL SCHEMATICS**



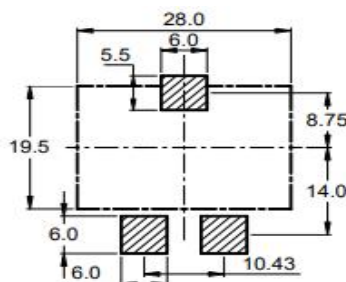
**7.APPLICATION**

- (1)Low profile,high current power supplies.
- (2)Battery powered devices.
- (3)DC/DC converters in distributed power systems.
- (4)DC/DC converters for field programmable gate array.

**8.FEATURES**

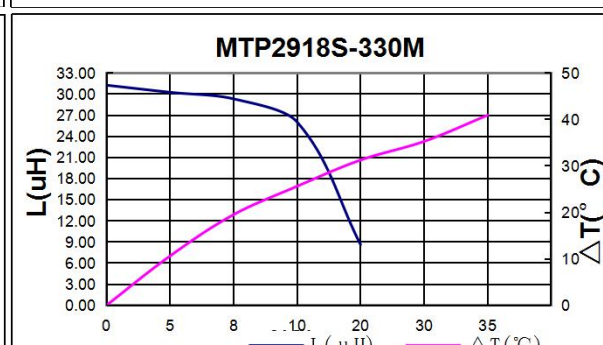
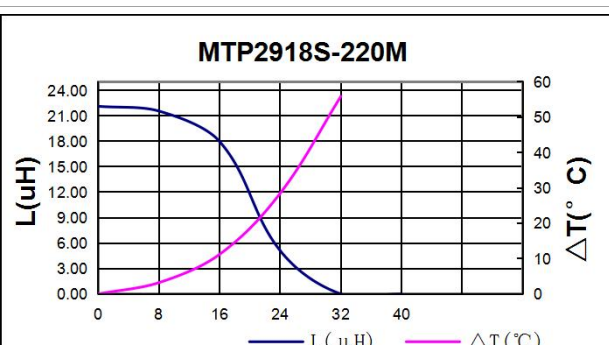
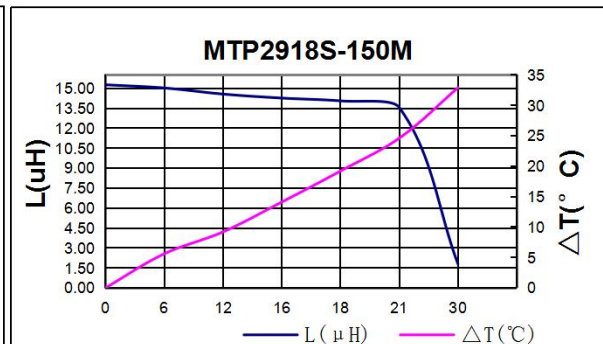
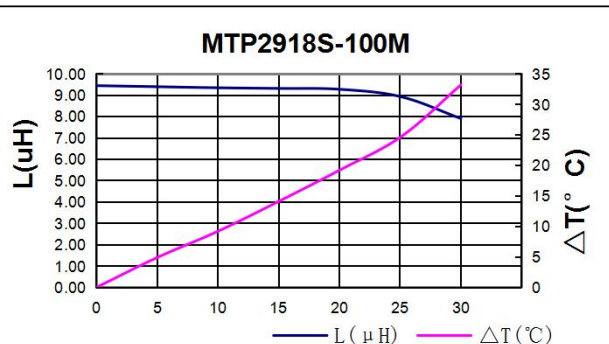
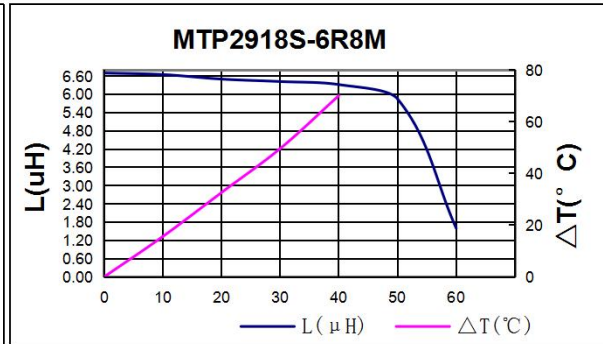
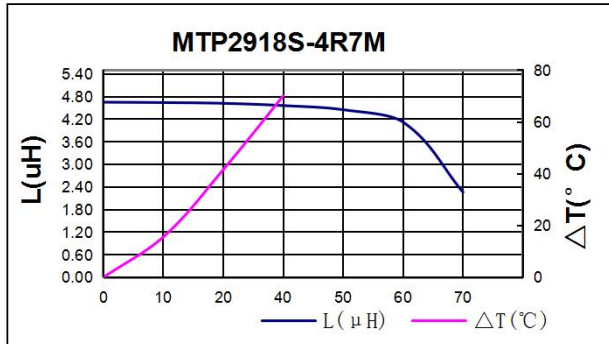
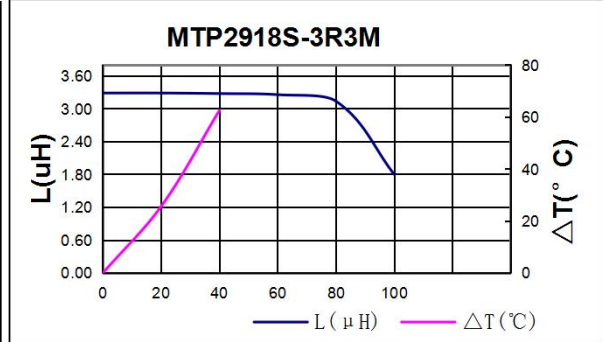
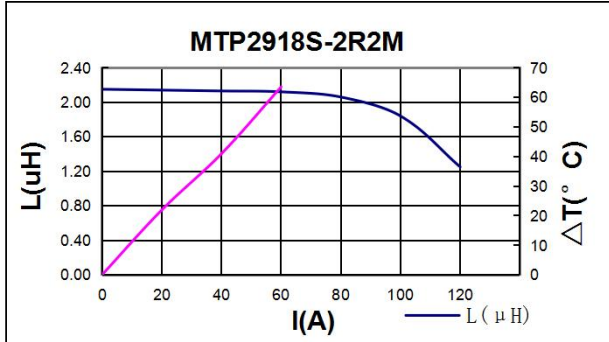
- (1)Assemblage design, sturdy structure.
- (2)High inductance, high current, low magnetic loss,low ESR, small parasitic capacitance.
- (3)Flat wire winding, achieve a low D.C. Resistance.
- (4)Temperature rise current and saturation current is less influenced by environment.

**9.RECOMMENDED PCB LAYOUT**



CUSTOMER		MODEL NO.	MTP2918S系列	REVISION	A/0
FILE NO.		PART NO.		DATE	2022.06.30

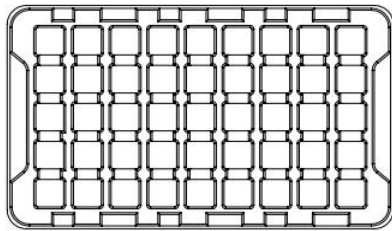
10.Saturation current VS temperature rise current curve



CUSTOMER		MODEL NO.	MTP2918S系列	REVISION	A/0
FILE NO.		PART NO.		DATE	2022.06.30
<b>11.可靠性Reliability</b>					
项目Item	规格与需求 Specification and Requirement	测试方法Test Method			
可焊性 Solderability test	沾锡面积不得小于95%上锡面 Terminals area must have 95% min solder coverage	上锡升温曲线Solder heat proof: (1) 预热: 160±10℃持续90s Preheating: 160±10℃ for 90 seconds (2) 恒温时段: 245±5℃持续2±0.5s Retention time: 245±5℃ for 2±0.5 seconds			
振动测试 Vibration test	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1) 振动频率(10Hz 55Hz 10Hz)60s为一个周期 Vibration frequency: (10Hz to 55Hz to 10Hz) in 60 seconds as a period (2) 振动时间 Vibration time: 三维正交坐标系每个方向振动(周期)循环2小时 Period cycled for 2 hours in each of 3 mutual perpendicular directions (3) 振幅 Amplitude: 1.5 mm Max			
冲击测试 Shock test	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1) 最大振幅 Peak value: 100G (2) 脉冲波长 Duration of pulse: 11ms (3) 三维正交坐标系每个方向正负方向冲击3次 Times in each positive and negative direction of 3 mutual perpendicular directions			
冷热冲击 Thermal shock	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1)重复以上100个循环Repeat 100 cycle as follow (-55±2℃,30±3分钟) 室温5分钟 (-55±2℃,30±3 minutes) Room temperature,5 minutes (+125±2℃,30±3分钟) 室温5分钟 (+125±2℃,30±3 minutes) Room temperature,5 minutes (2)恢复: 测试于标准条件下恢复48+4/-0小时(参考注释1) Recovery:48+4/-0 hours of recovery under the standard condition after the test. (see Note1)			
耐高温测试 High temperature life test	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1)环境条件: 85±2℃ Environment condition : 85±2℃ 应用电流: 额定电流 Applied current: Rated current (2)持续时间: 1000+4/-0 小时(参考注释1) Duration:1000+4/-0 hours (see Note1)			
耐湿测试 Humidity Resistance	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1)环境条件: 60±2℃ Environment condition : 60±2℃ 湿度: 90~95% Humidity:90~95% 应用电流: 额定电流 Applied current: Rated current (2)持续时间: 1000+4/-0 小时(参考注释1) Duration:1000+4/-0 hours (see Note1)			
低温存放测试 Low temperature life test	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1)存储温度 Store temperature -55±2℃下存放 1000+4/-0 小时 -55±2℃ for total 1000+4/-0 hours			
高温存放测试 High temperature life test	感值变化: 不超过±5% 且无破裂等机械损伤产生 Inductance change: Within±5% Without mechanical damage such as break	(1)存储温度 Store temperature +125±2℃下存放 1000+4/-0 小时 +125±2℃ for total 1000+4/-0 hours			

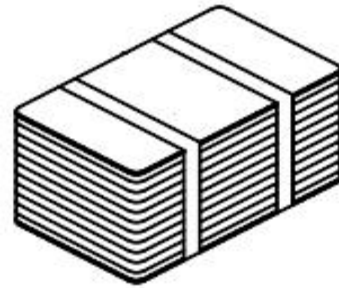
CUSTOMER		MODEL NO.	MTP2918S系列	REVISION	A/0
FILE NO.		PART NO.		DATE	2022.06.30

12、包装 Packaging

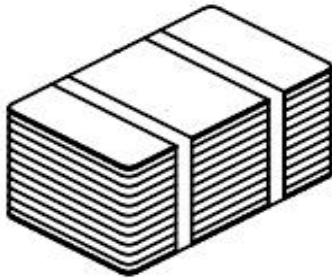


Quantity/Tray:40PCS

Tray X 7

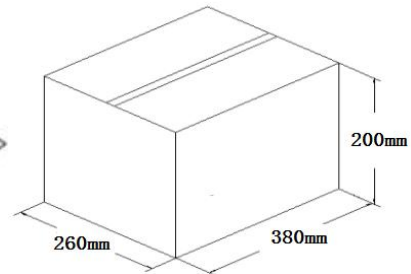


Quantity/Bundle:280PCS



Quantity/Bundle:280PCS

Bundle X 1



Quantity/Carton:280PCS

包装数量packing quantity

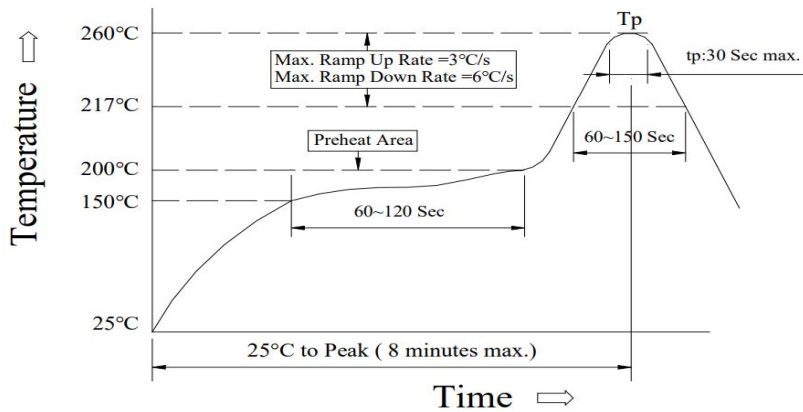
Product Series 产品系列	Quantity/Tray 数量/盘	Quantity/Bundle 数量/捆	Quantity/Carton 数量/箱
MTP2918S	40PCS	280PCS	280PCS

CUSTOMER		MODEL NO.	MTP2918S系列	REVISION	A/0
FILE NO.		PART NO.		DATE	2022.06.30

Reflow curve

※ Reflow Profile

Power Choke Coil Type



1. Reflow Soldering Method

Reflow Soldering	Tp:255~260°C	Max.30 seconds ( tp )
	217°C	60~150 seconds
Pre-Heat	150 ~ 200°C	60~120 seconds
Time 25°C to peak temperature	8 minutes max.	

2. Soldering iron method : 350±5°C Max.3 seconds.



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Fixed Inductors](#) category:*

*Click to view products by [COILMX](#) manufacturer:*

Other Similar products are found below :

[CR32NP-100KC](#) [70F224AI](#) [MHQ1005P10NJ](#) [MHQ1005P1N0S](#) [MHQ1005P2N4S](#) [MHQ1005P3N6S](#) [MHQ1005P5N1S](#) [MHQ1005P8N2J](#)  
[PE-53601NL](#) [PE-53602NL](#) [PG0936.113NLT](#) [9220-20](#) [9310-16](#) [PM06-2N7](#) [PM06-39NJ](#) [A01TK](#) [1206CS-471XJ](#) [HC2-R47-R](#) [HC8-1R2-R](#)  
[HCF1305-3R3-R](#) [1206CS-151XG](#) [RCH664NP-4R7M](#) [RCP1317NP-391L](#) [DH2280-4R7M](#) [DS1608C-106](#) [B10TJ](#) [B82498B3101J000](#) [ELJ-](#)  
[RE27NJF2](#) [1812CS-153XJ](#) [1812CS-183XJ](#) [1812CS-223XJ](#) [1812LS-104XJ](#) [1812LS-105XJ](#) [1812LS-124XJ](#) [1812LS-154XJ](#) [1812LS-223XJ](#)  
[1812LS-224XJ](#) [1812LS-563XJ](#) [1812LS-683XJ](#) [1812LS-824XJ](#) [NIN-FB101JTR110F](#) [NIN-FB471JTR62F](#) [NIN-FC1R5JTR220F](#) [NIN-](#)  
[HCR15JTRF](#) [NIN-HCR33JTRF](#) [NIN-HDR22JTRF](#) [NIN-HDR82JTRF](#) [NIN-HK2N7STRF](#) [NIN-PA150KTR370F](#) [NIN-PB100KTR550F](#)