Specification of Cjiang products

Customer	
Product Name	Wire Wound Molded SMD Power Inductors
Customer P/N:	
Cjiang P/N:	FAUL1054TF Series

[■ New Released, □ Revised] SPEC No：

REMARK：		
Customer Approval Feedback		

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Version change history					
Rev	**Date**	**Description**	**APPROVED**	**CHECKED**	**DRAWN**
1.0	**2025/11/11**	**Document formulation**	**BOND**	**Charles**	**Roy**

Caution：

All products listed in this specification are developed, designed and intended for use in general electronics equipment. The products are not designed or Warranted to meet the requirements of the applications listed below, whose performance and/or quality require especially high reliability, or whose failure, malfunction or trouble might directly cause damage to society, person, or property. Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below. Please contact us for more details if you intend to use our products in the following applications.

1. Aircraft equipment.
2. Aerospace equipment.
3. Undersea equipment.
4. nuclear control equipment.
5. military equipment.
6. Power plant equipment.
7. Medical equipment.
8. Traffic signal equipment.
9. Disaster prevention / crime prevention equipment.
10. Data-processing equipment.
11. Applications of similar complexity or with reliability requirements comparable to the applications listed in the above.
12. This series of products of our company apply to regular use in general automotive electronics and in-car electronics.

Not applicable to components related to driving safety of automobiles.

The company does not guarantee the applicability or performance of this series related to equipment failures during the operation of automobiles — including but not limited to brake failure, driving failure, poor operation, and other failures that may cause damage to the lives, bodies, or property of human, as well as applications that may have significant social impact (hereinafter referred to as "specific uses").

Introduction

AEC-Q200

- Compliant for 100% Lead(Pb)-Free and RoHS.
- Higher current carrying Capacity，lower DCR，and more efficiency.
- High reliability -Reliability test complied to AEC-Q200
- Operating temperature range from -55℃ to +165℃(Including self - temperature rise) .

Applications

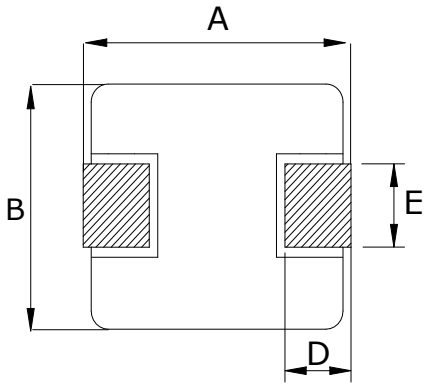
•Automotive applications

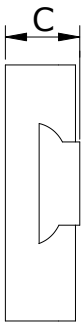
Product Identification

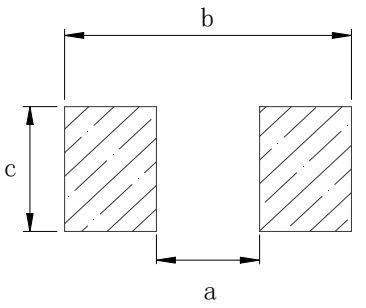
FAUL	1054	TF	-1R5	MT
①	②	③	④	⑤

① FAUL---------- Series name
② 1054---------- Dimension
③ TF---------- Special products
④ 1R5 ---------- Inductance Value (1R5 = 1.5μH)
⑤ M ---------- Inductance Tolerance (M= ± 20%)

Dimensions-mm （Unit：mm）





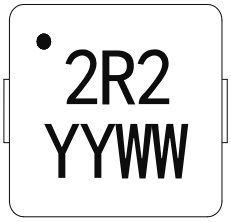


Recommend Land Pattern

A	B	C	D	E	a typ	b typ	c typ
10.85±0.35	10±0.3	5.2±0.2	2.2±0.5	4.5±0.3	4.9	12.88	5.0

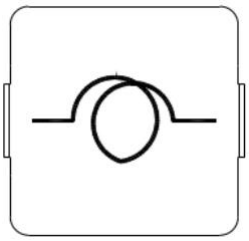
Marking

Note：LASER



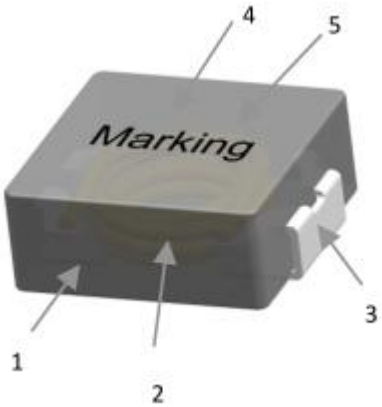
Example：2.2μH----＞2R2
YY：Year ----＞ （EX：2023--＞23, 2024--＞24）
WW：weekly ----＞ （Series number 01~54 ）

Connection



Upside of Chip

Structure and Components



NO	Components	Material
1	CORE	Soft magnetic composite powder
2	WIRE	Polyester Wire or equivalent.
3	Clip	100% Pb free solder(Ni+Sn---Plating)
4	paint	Epoxy resin
5	Marking	Laser

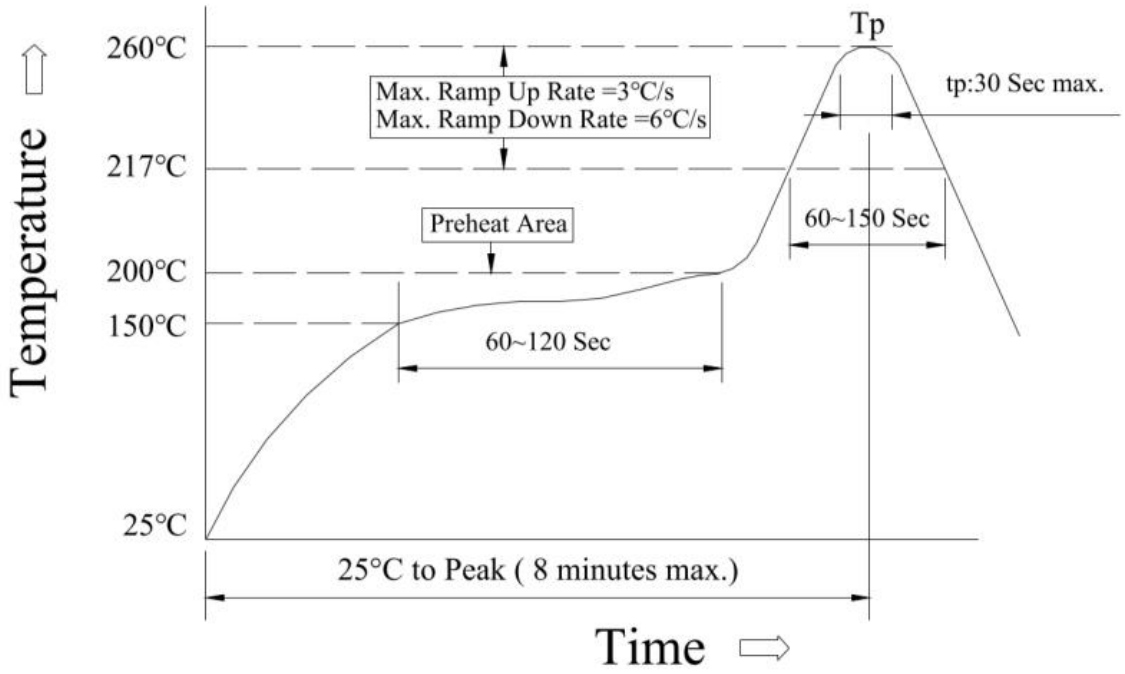
Specifications

Part No.	Inductance	DC Resistance	Saturation Current		Heating Rating Current		Rated Voltage (V)
	L0 (μH)±20 %	DCR (mΩ)	Isat (A)		Irms (A)		Max
	100 kHz, 1V	MAX.	Max	Typ	Max	Typ	Rated Voltage (V)
FAUL1054TF-R68MT	0.68	2.22	39.4	46	28.8	32	80
FAUL1054TF-1R0MT	1.0	2.76	31.7	37	27	30	80
FAUL1054TF-1R5MT	1.5	4.2	23	26.8	22.3	24.8	80
FAUL1054TF-2R2MT	2.2	4.9	21.4	25	20.7	23	80
FAUL1054TF-3R3MT	3.3	7.4	16.3	19	16.8	18.7	80
FAUL1054TF-4R7MT	4.7	10	13.5	15.7	13	14.5	80
FAUL1054TF-6R8MT	6.8	14	11.4	13.3	10.8	12	80
FAUL1054TF-8R2MT	8.2	20.7	11.1	13	9.5	10.6	80
FAUL1054TF-100MT	10	24.2	10.9	12.7	7.8	8.7	80
FAUL1054TF-150MT	15	31.3	7.9	9.2	6.8	7.6	80
FAUL1054TF-220MT	22	50	7.5	8.8	5.4	6	80
FAUL1054TF-330MT	33	75.3	6.5	7.6	4.3	4.8	80
FAUL1054TF-470MT	47	103	4.2	4.9	3.6	4.1	80
FAUL1054TF-680MT	68	152	3.6	4.2	3.0	3.3	80
FAUL1054TF-101MT	100	234	3.0	3.5	2.5	2.8	55

Notes

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 165 °C
3. Irms (A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25 °C)
4. Isat(A):DC current (A) that will cause L0 to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 165 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Cleaning Process Note
   (a) If this power choke is dipped in the cleaning agent, such as toluene, xylene, ketone, and ether system, there is a possibility that the performance decreases greatly
   (b) The high power ultrasonic washing may damage the choke body.
   (c) Please contact us if you need the cleaning via the above agents or ultrasonic washing.

Recommended Soldering Technologies



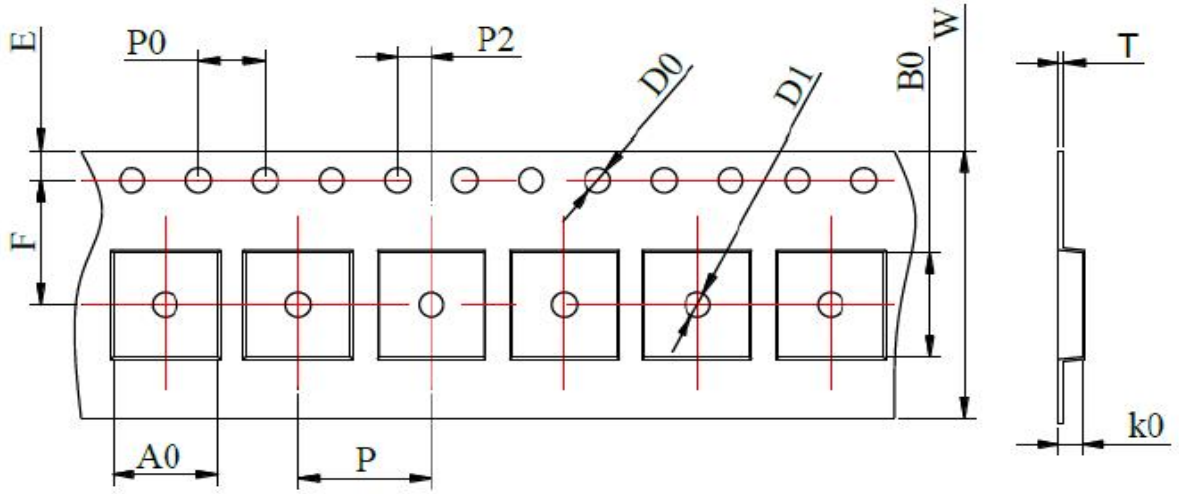
(1) Reflow Soldering Method :

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

(2) Soldering iron Method : 350±5℃ max.3 seconds

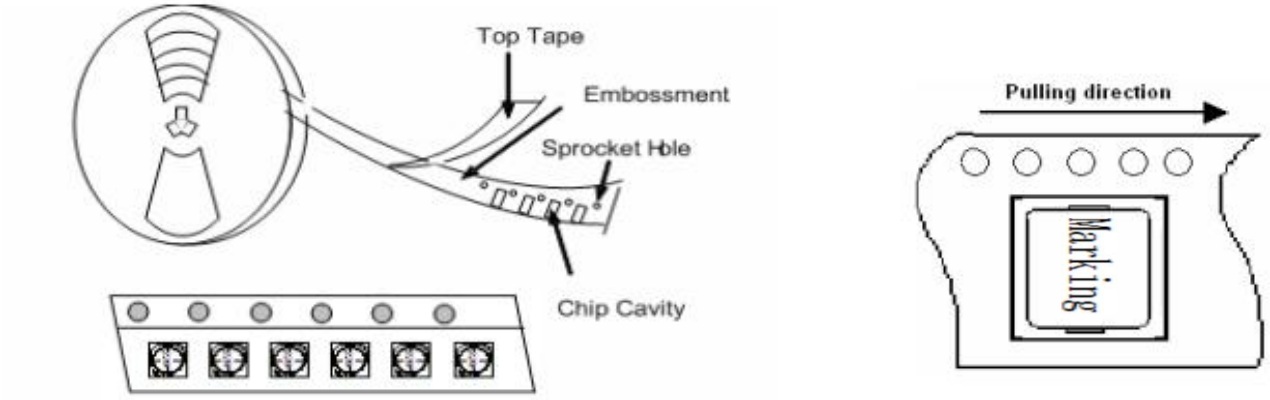
Packaging Information

(1) Tape Packaging Dimensions（Unit：mm）



Type	Tape dimensions (mm)											
	W	P	P0	P2	D0	D1	T	A0	B0	K0	E	F
FAUL1054TF	24 ±0.3	16 ±0.1	4 ±0.1	2 ±0.05	1.5 ±0.1	1.5 ±0.1	0.4 ±0.05	10.4 ±0.1	11.6 ±0.1	5.8 ±0.1	1.75 ±0.1	11.5 ±0.1

Taping Drawings (UNIT:mm)



(2) Packaging Quantity

500 pcs / reel