

SPECIFICATION FOR APPROVAL

CUSTOMER

上海南芯

CUSTOMER P/N:

DESCRIPTION/SPEC:

NS2920-100M-R-S

EDITION:

A

DATE:

2024/1/2

MADE BY:张瑞平

CHECKED BY:李孝转

APPROVED BY: 葛胜军

www.southshu.com

18502595337

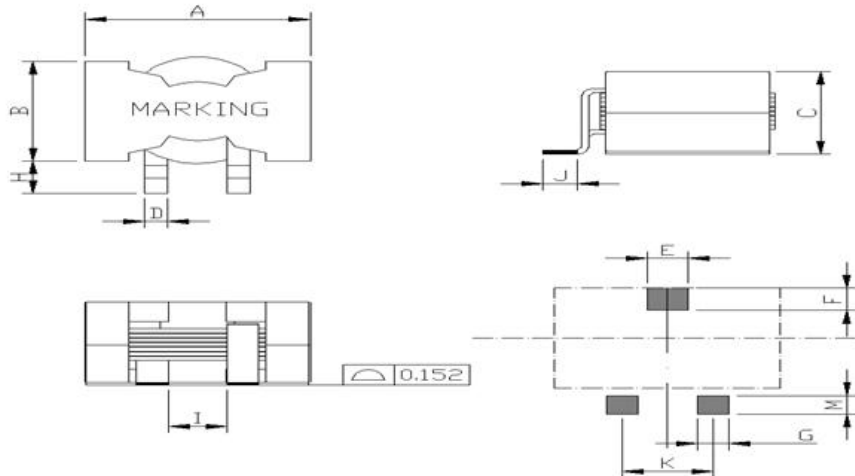
CUSTOMER APPROVE

Please fax back after confirm of signature.

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I . CONFIGURATION&DIMENSIONS:



A:28.5max mm

B:20.5max mm

C:21.5max mm

D:4.0±0.3 mm

E:5.0REF mm

F:4.5REF

G:4.0REF

II.ELECTRICAL CHARACTERISTIC:

ITEM	Spec.	Test condition
Ls	10uH±20%	100KHz/1V
DCR	3.5mΩMAX	25℃
Isat	Isat=35A Ls Drop 30%TYP	100KHz/1V
IDC	Irms=37A Δt=40℃ MAX	100KHz/1V

III. MATERIALS:

NO. DESCRIPTION

a. INKING

b. CORE

c. WIRE

d. CLIP

IV.GENERAL SPECIFICATION:

1. All test data is referred to 25℃ ambient.

2. Idc:DC current (A)that will cause an approximate
ΔT of 40℃ (Typical)

3. Isat:DC current (A) that will cause Lo to drop
approximately 30%(Typical)

4. Operatomg temperature range -55℃ to +125℃ .

5. Inductance tolerance ±20%.

6. The part temperature(ambient+temp rise)should not exceed 125℃ under worse case operating conditions.

Circuit design,component placement,PWB trace size and thickness,airflow and other cooling provision all affect
the part temperature.Part temperature should be verified in the end application.

7. The rated current as listed is either the saturation current or the heating current depending on whith value is lower.

PeakTemp:260.℃ max
Max time above230℃ C:50secmax
Max time above200℃ C:70secmax

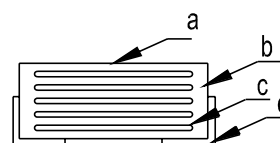
Temperature
Rising Area
Preheat Area
Soften Area
Reannealing Area

≤60℃/sec max
150~200℃/60~120sec
20.0~4.0℃/sec max
≤(1.0~5.0)℃/sec max

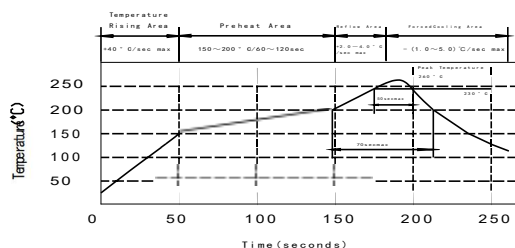
250
200
150
100
50

050100150200250

Time(seconds)



PeakTemp:260.℃ max
Max time above230℃:50secmax
Max time above200℃:70secmax



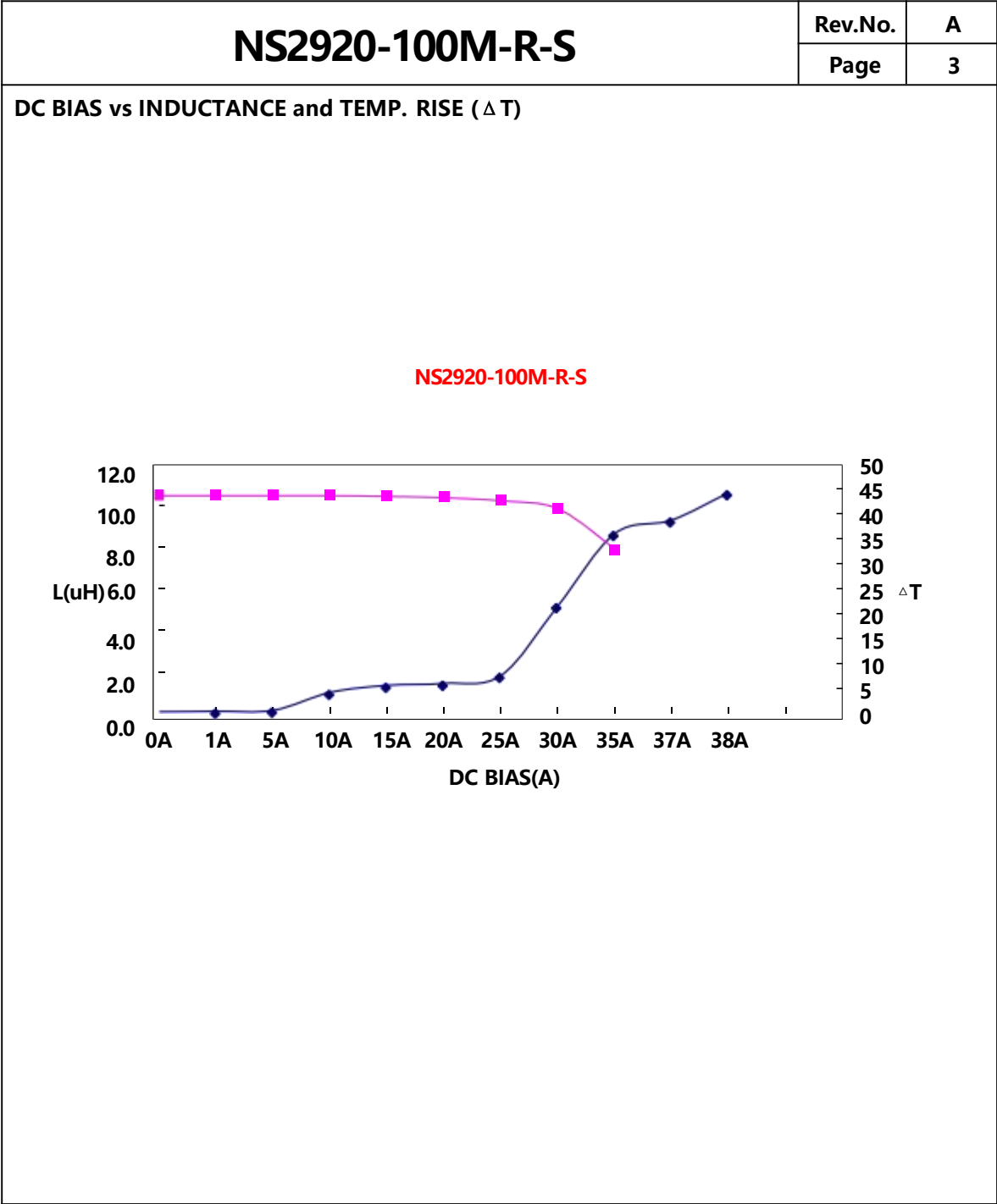


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Meas. Item	Electrical character					
	Ls	DCR	Idc	Isat		
Spec.	10±20%	3.5 MAX	ΔT 40 Typical@37(A)dc	Drop 35% Typical @35(A)dc		
Unit	uH	m Ω	℃	uH		
Test condition	100KHz/1V	25℃	100KHz /1V	100KHz/ 1V		
1	10.50	2.04	OK	7.87		
2	10.46	2.02	OK	7.45		
3	10.46	2.03	OK	7.98		
4	10.55	2.04	OK	7.99		
5	10.38	2.05	OK	7.65		
6						
7						
8						
9						
10						
X	10.47	2.04		7.79		
max	10.55	2.05		7.99		
min	10.38	2.02		7.45		
R	0.17	0.03		0.54		
TEST INSTRUMENT:						
☐ HP4284AHP4285A METER LCD &DCR&Q&IDC&SRF						
☒ CH-502 DCR TEST METER.						
☐ HP4287A METER LCD&Z&SRF.						
☒ WK3260B+WK3265B LCR METER AND DC BIAS TEST EQUIPMENT						

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Meas. Item	Mechanical dimensions(UNITS:mm)								
	A	B	C	D					
Spec.	28.5	20.5	21.5	4.0					
Tolerance	MAX	MAX	MAX	$\pm$ 0.3					
1	27.63	19.48	20.60	3.95					
2	27.74	19.73	20.64	3.98					
3	27.61	19.48	20.70	3.95					
4	27.98	19.70	20.62	3.98					
5	27.70	19.90	20.60	3.98					
6									
7									
8									
9									
10									
$\overline{X}$	27.73	19.66	20.63	3.97					
max	27.98	19.90	20.70	3.98					
min	27.61	19.48	20.60	3.95					
R	0.37	0.42	0.10	0.03					
REMARK:									