ISO9001 ACROPARTS TECHNOLOGY CO.,LTD.

SPECIFICATION FOR APPROVAL

CUSTOMER:	
CUSTOMER P/N:	
ATC P/N:	DSNS0704-SERIES
QUANTITY:	0 PCS
DATE:	2021.02.09

Please confirm your acceptance of this approval sheet by return fax.

□ APPROVED

□ REJECTED

RoHS 危害物質限用

DRAWN BY	CHECKED BY	APPROVED BY
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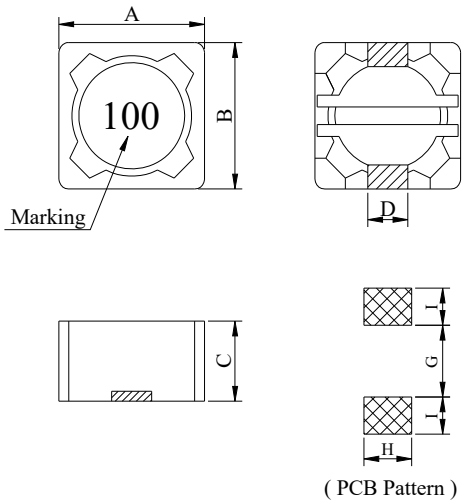
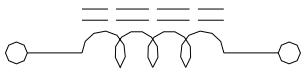
SPECIFICATION		ATC's DWG NUMBER	DSNS0704-SERIES		
PROD. NAME	SHIELDED SMD POWER INDUCTOR	REV.	B	PAGE	1

1 Configuration and Dimensions：



Item	Spec. (mm)
A	7.30 ± 0.20
B	7.30 ± 0.20
C	4.50 max.
D	1.80 typ.
G	4.40 ref.
H	2.20 ref.
I	2.00 ref.

2 Schematic Diagram：



3 Rating：

Operating Temperature：-40℃～+105℃

Storage Temperature：Under 40℃, Humidity < 75%

4 Material List：

a. Core：Ferrite DR core
b. Core：Ferrite RI core
c. Wire：Enamelled copper wire (class H)
d. Adhesive：Epoxy resin
e. Terminal：Cu / Ni / Sn

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5 Electrical Characteristics：

DWG No.	Inductance (uH)	Test Freq. (Hz)	RDC (Ω)max.	IDC (A)max.	Tol.
DSNS0704-1R0□Z	1.000	1K	0.015	6.000	M
DSNS0704-2R2□Z	2.200	1K	0.020	5.000	M
DSNS0704-3R3□Z	3.300	1K	0.030	4.200	M
DSNS0704-4R7□Z	4.700	1K	0.035	3.300	M
DSNS0704-5R6□Z	5.600	1K	0.047	3.000	M
DSNS0704-6R8□Z	6.800	1K	0.048	2.900	M
DSNS0704-8R2□Z	8.200	1K	0.050	2.000	M
DSNS0704-100□Z	10.00	1K	0.049	1.840	M
DSNS0704-120□Z	12.00	1K	0.058	1.710	M
DSNS0704-150□Z	15.00	1K	0.081	1.470	M
DSNS0704-180□Z	18.00	1K	0.091	1.310	M
DSNS0704-220□Z	22.00	1K	0.110	1.230	M
DSNS0704-270□Z	27.00	1K	0.150	1.120	M
DSNS0704-330□Z	33.00	1K	0.170	0.960	M
DSNS0704-390□Z	39.00	1K	0.230	0.910	M
DSNS0704-470□Z	47.00	1K	0.260	0.880	M
DSNS0704-560□Z	56.00	1K	0.350	0.750	M
DSNS0704-680□Z	68.00	1K	0.380	0.690	M
DSNS0704-820□Z	82.00	1K	0.430	0.610	M
DSNS0704-101□Z	100.0	1K	0.610	0.600	M
DSNS0704-121□Z	120.0	1K	0.660	0.520	M
DSNS0704-151□Z	150.0	1K	0.880	0.460	M
DSNS0704-181□Z	180.0	1K	0.980	0.420	M
DSNS0704-221□Z	220.0	1K	1.170	0.360	M
DSNS0704-271□Z	270.0	1K	1.640	0.340	M
DSNS0704-331□Z	330.0	1K	1.860	0.320	M
DSNS0704-391□Z	390.0	1K	2.850	0.290	M
DSNS0704-471□Z	470.0	1K	3.010	0.260	M
DSNS0704-561□Z	560.0	1K	3.620	0.230	M
DSNS0704-681□Z	680.0	1K	4.630	0.220	M

Note：

1. □ -Tolerance： M=±20%
2. IDC base on △L / L0A=35% typ.

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5 Electrical Characteristics：

DWG No.	Inductance (uH)	Test Freq. (Hz)	RDC (Ω)max.	IDC (A)max.	Tol.
DSNS0704-821□Z	820.0	1K	5.200	0.200	M
DSNS0704-102□Z	1000	1K	6.000	0.180	M

Note：

1. □ -Tolerance： M=±20%
2. IDC base on △L / L0A=35% typ.

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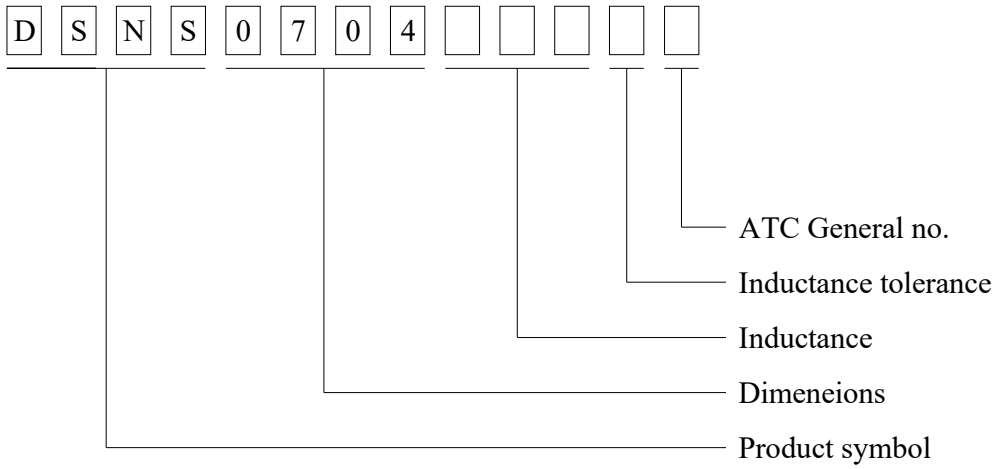
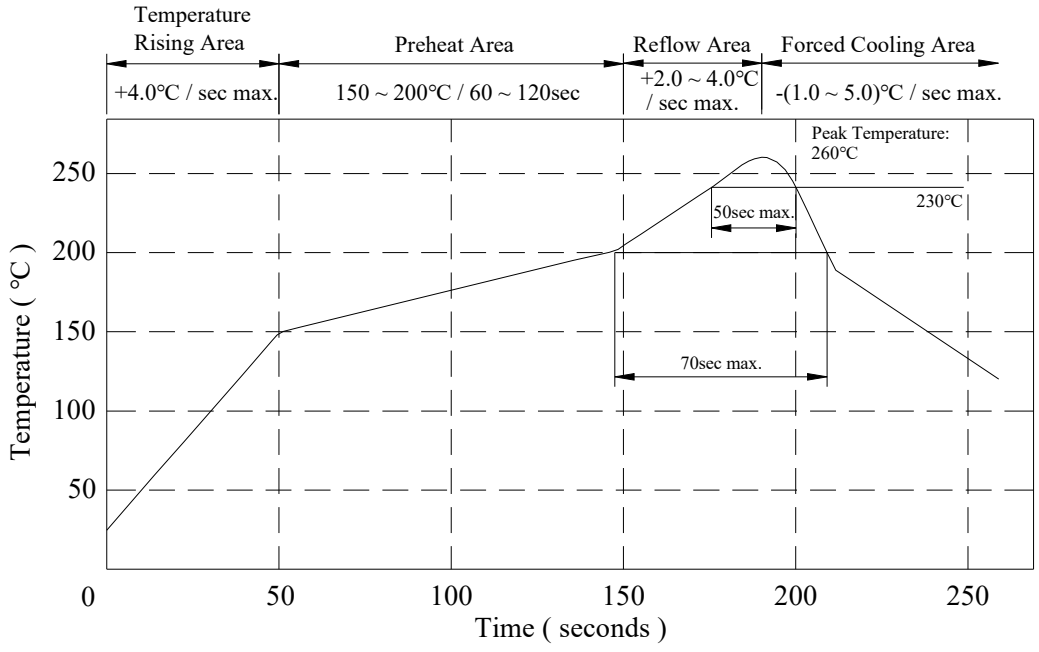
6 DWG Expression：



7 Classification Reflow Profile：

Peak Temp：260℃ max.
Max time above 230℃：50sec max.
Max time above 200℃：70sec max.



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8 Reliability Test：

1-1.Mechanical Performance

No	Item	Specification	Test Method
1	Vibration	Appearance：No damage Inductance：within±10% of initial value	Test device shall be soldered on the substrate Oscillation Frequency：10 to 55 to 10Hz for 1min Amplitude：1.5mm Time：2hrs for each axis (X, Y & Z), total 6hrs
2	Resistance to Soldering Heat	Apperance：No damage	Pre-heating：150℃, 1min Solder Composition：Sn/Ag3.0/Cu0.5 Solder Temperature：260±5℃ Immersion Time：10±1sec
3	Solder ability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating：150℃, 1min Solder Composition：Sn/Ag3.0/Cu0.5 Solder Temperature：245±5℃ Immersion Time：4±1sec
4	Resistance to solvent	There must be no change in appearance or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.

1-2.Environmental Performance

No	Item	Specification	Test Method		
1	Temperature Shock	Appearance：No damage Inductance：within±10% of initial value	10 cycles (Air to Air) 1 cycles shall consist of: 30 minutes exposure to –55 ℃ 30 minutes exposure to 125 ℃ 15 seconds maximum transition between temperatures		
2	Temperature Cycle		One cycle：		
			Step	Temperature (℃)	Time (min)
			1	-25±3	30
			2	25±2	3
			3	85±3	30
			4	25±2	3
			Total：100cycles Measured after exposure in the room condition for 24hrs		
3	Humidity Resistance		Temperature：40±2℃ Relative Humidity：90 ~ 95% Time：1000hrs Measured after exposure in the room condition for 24hrs		
4	Heat Life		Temperature：85±3℃ Relative Humidity：20% Applied Current：Rated Current Time：1000hrs Measured after exposure in the room condition for 24hrs		
5	Cold Resistance		Temperature：-25±3℃ Relative Humidity：0% Time：1000hrs Measured after exposure in the room condition for 24hrs		

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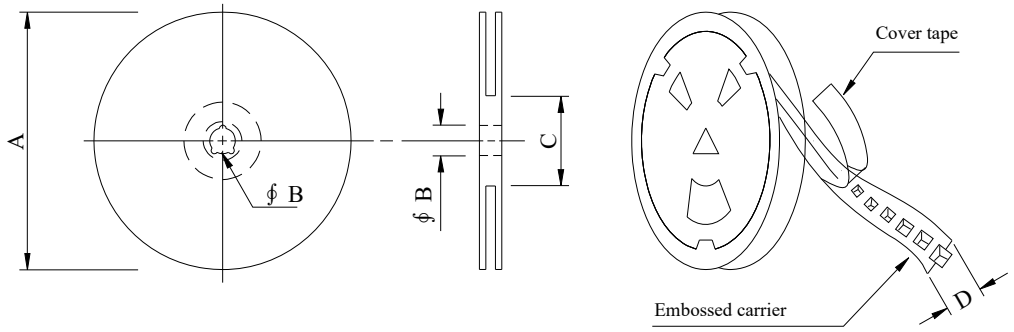
9 Packaging Information：



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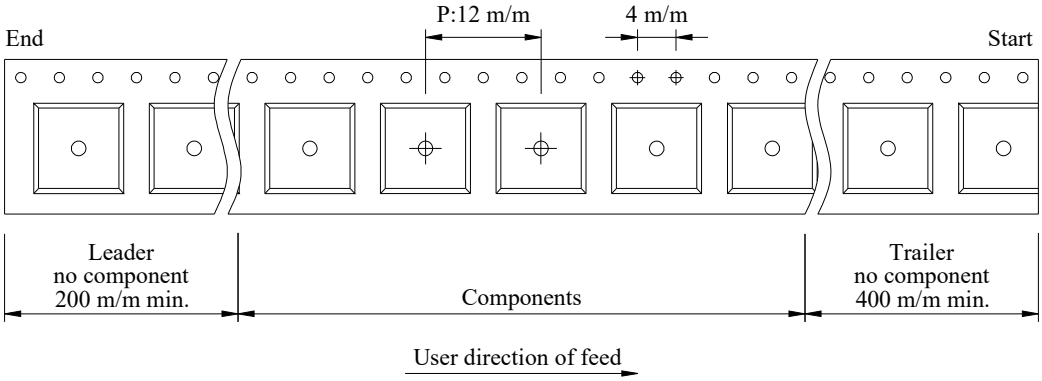

Reel type	A	B	C	D	Reel Q'ty
13-16	330mm	13mm	100mm	16mm	1000pcs