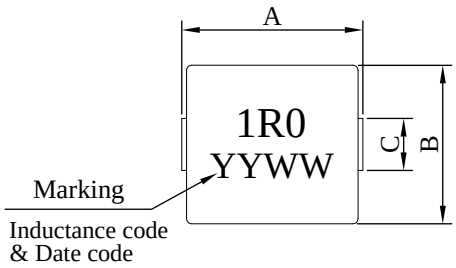
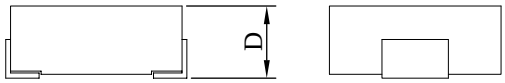
SPECIFICATION FOR APPROVAL

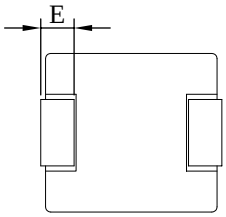
REF :

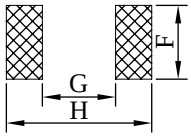
PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	1

Ⅰ．Configuration and dimensions：









(PCB Pattern)

Unit：mm

A	B	C	D	E	F	G	H
11.00 ±0.5	10.00 ±0.3	3.00 ±0.3	3.80 ±0.2	2.30 ±0.3	3.50 ref.	5.40 ref.	13.60 ref.

Ⅱ．Description：

a．Powder molding construction

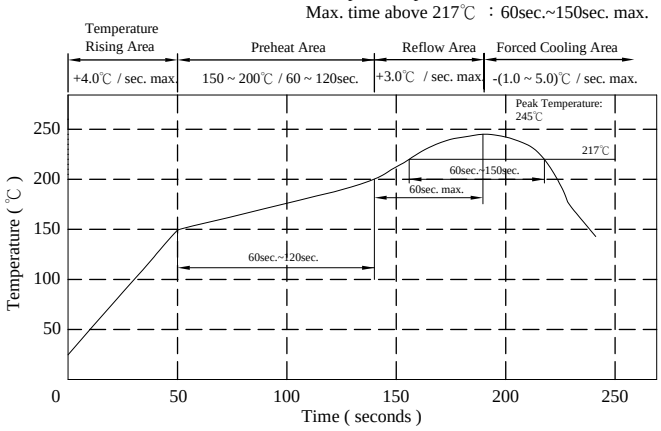
b．Magnetically shielded

c．Wire：Polyester wire or equivalent

d．Products comply with RoHS' requirements

e．Halogen free

Peak temp.：245℃ max.
Max. peak temp. - 5℃：30sec. max.
Max. time above 217℃ ：60sec.~150sec. max.



Ⅲ．General specification：

a．Storage temp.：-40℃ ----+125℃

b．Operating temp.：-40℃----+125℃

（ Temp. rise included ）

c．Resistance to solder heat：260℃.10 sec.

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	2

Ⅳ．Electrical characteristics ：

DWG No.	Inductance (μH)	Isat (A) typ.	Irms (A) typ.	RDC (mΩ)	
				max.	typ.
GSSM1040R10Y2AU	0.10 ± 30%	85.00	46.00	0.41	0.35
GSSM1040R15Y2AU	0.15 ± 30%	75.00	43.00	0.60	0.50
GSSM1040R18Y2AU	0.18 ± 30%	72.00	38.00	0.80	0.54
GSSM1040R19Y2AU	0.19 ± 30%	70.00	36.00	0.90	0.60
GSSM1040R20Y2AU	0.20 ± 30%	70.00	35.00	0.95	0.66
GSSM1040R22M2AU	0.22 ± 20%	60.00	35.00	1.00	0.80
GSSM1040R24M2AU	0.24 ± 20%	60.00	34.00	1.00	0.80
GSSM1040R25M2AU	0.25 ± 20%	60.00	33.50	1.00	0.80
GSSM1040R27M2AU	0.27 ± 20%	60.00	33.00	1.00	0.82
GSSM1040R30M2AU	0.30 ± 20%	60.00	32.00	1.10	0.94
GSSM1040R33M2AU	0.33 ± 20%	60.00	31.00	1.20	1.00
GSSM1040R36M2AU	0.36 ± 20%	60.00	31.00	1.20	1.05
GSSM1040R39M2AU	0.39 ± 20%	60.00	30.00	1.30	1.10
GSSM1040R45M2AU	0.45 ± 20%	45.00	29.00	1.50	1.30
GSSM1040R47M2AU	0.47 ± 20%	43.00	28.00	1.50	1.30
GSSM1040R56M2AU	0.56 ± 20%	40.00	25.00	1.80	1.60
GSSM1040R68M2AU	0.68 ± 20%	39.00	22.00	2.70	2.40
GSSM1040R75M2AU	0.75 ± 20%	39.00	22.00	2.70	2.40
GSSM1040R88M2AU	0.88 ± 20%	38.00	20.00	2.90	2.50
GSSM1040R90M2AU	0.90 ± 20%	38.00	20.00	3.00	2.60
GSSM10401R0M2AU	1.00 ± 20%	36.00	18.00	3.30	3.00
GSSM10401R2M2AU	1.20 ± 20%	33.00	17.00	3.80	3.30

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	3

Ⅳ．Electrical characteristics ：

DWG No.	Inductance (μH)	Isat (A) typ.	Irms (A) typ.	RDC (mΩ)	
				max.	typ.
GSSM10401R5M2AU	1.50 ± 20%	33.00	16.00	4.60	4.00
GSSM10401R8M2AU	1.80 ± 20%	30.00	14.00	6.40	5.30
GSSM10402R2M2AU	2.20 ± 20%	27.00	12.00	7.00	6.50
GSSM10402R5M2AU	2.50 ± 20%	23.00	11.50	8.70	7.90
GSSM10403R0M2AU	3.00 ± 20%	21.00	11.50	11.50	10.00
GSSM10403R3M2AU	3.30 ± 20%	20.00	11.00	11.80	10.80
GSSM10403R9M2AU	3.90 ± 20%	19.00	10.50	14.50	12.60
GSSM10404R0M2AU	4.00 ± 20%	18.00	10.20	15.00	13.00
GSSM10404R7M2AU	4.70 ± 20%	17.00	10.00	15.50	15.00
GSSM10405R6M2AU	5.60 ± 20%	14.00	9.00	19.30	17.00
GSSM10406R2M2AU	6.20 ± 20%	13.70	8.70	21.30	17.20
GSSM10406R5M2AU	6.50 ± 20%	13.60	8.60	22.30	17.30
GSSM10406R8M2AU	6.80 ± 20%	13.50	8.50	23.30	17.50
GSSM10407R3M2AU	7.30 ± 20%	13.00	8.30	21.80	19.00
GSSM10408R2M2AU	8.20 ± 20%	12.50	8.00	22.50	20.00
GSSM1040100M2AU	10.00 ± 20%	12.00	7.50	30.00	27.00
GSSM1040120M2AU	12.00 ± 20%	11.00	6.80	42.00	36.00
GSSM1040150M2AU	15.00 ± 20%	10.00	6.25	45.00	40.00
GSSM1040180M2AU	18.00 ± 20%	9.00	5.50	62.00	56.00
GSSM1040220M2AU	22.00 ± 20%	7.00	5.00	74.00	64.00
GSSM1040270M2AU	27.00 ± 20%	6.00	4.00	100.00	86.00
GSSM1040330M2AU	33.00 ± 20%	5.00	3.50	112.00	92.00

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	4

Ⅳ．Electrical characteristics ：

DWG No.	Inductance (μH)	Isat (A) typ.	Irms (A) typ.	RDC (mΩ)	
				max.	typ.
GSSM1040400M2AU	40.00 ± 20%	4.80	3.30	150.00	130.00
GSSM1040470M2AU	47.00 ± 20%	4.50	3.00	167.00	145.00
GSSM1040680M2AU	68.00 ± 20%	3.00	2.00	240.00	205.00
GSSM1040820M2AU	82.00 ± 20%	2.50	1.50	320.00	265.00

1). Electrical specifications at 25℃

2). Measured frequency of inductance is 100 kHz / 1V

3). Isat base on △ L/L0A＝30% typ. (Approximately transient current)

4). Irms base on Temp. rise 40℃ typ.

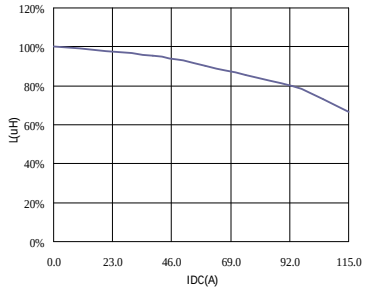
SPECIFICATION FOR APPROVAL

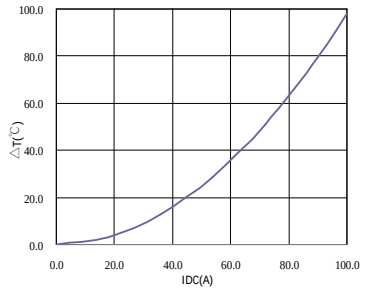
REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	5

V . Curve：

GSSM1040R10Y2AU





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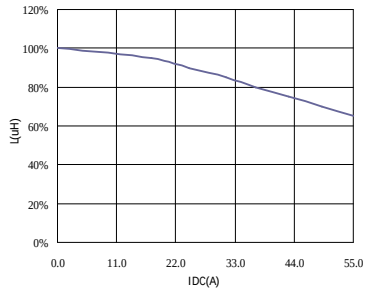

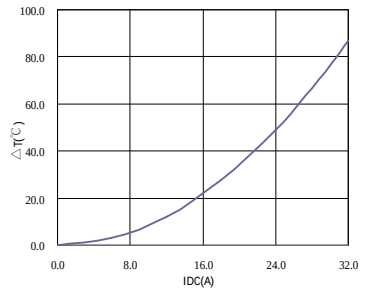

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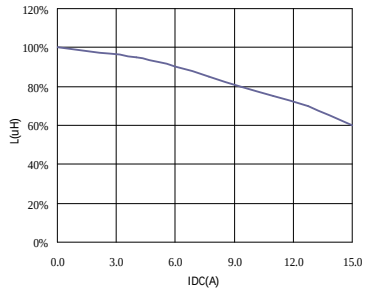

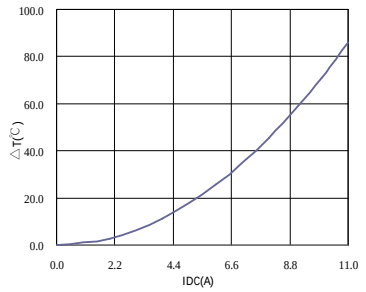

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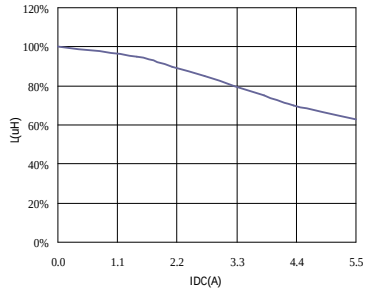
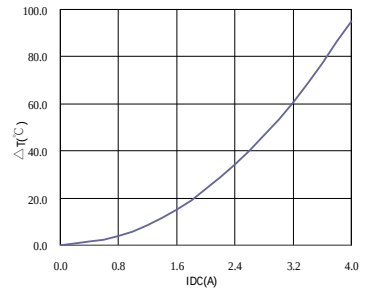




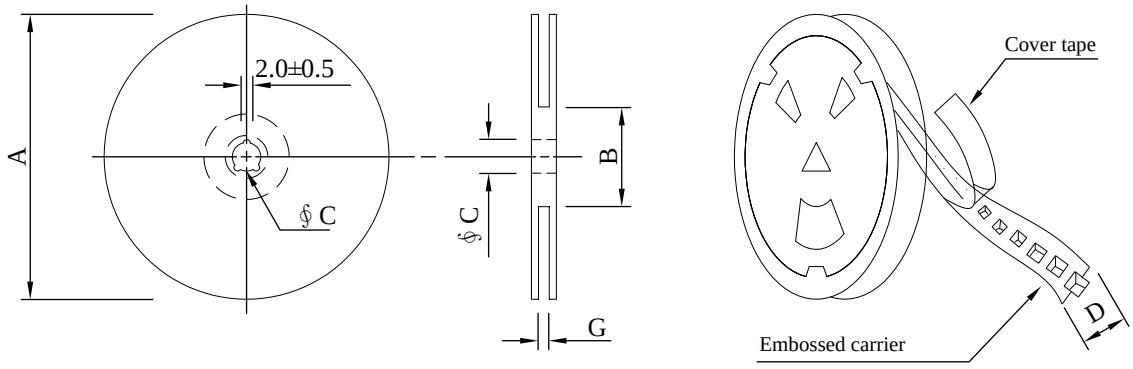
SPECIFICATION FOR APPROVAL

REF :

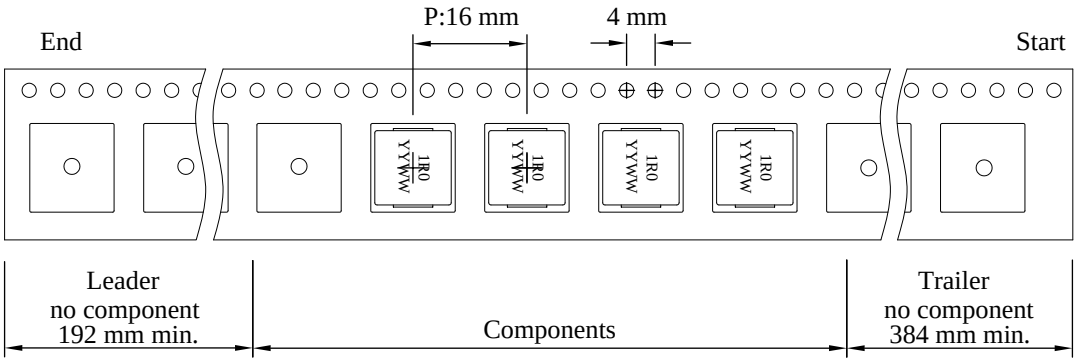
PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	6

Ⅵ．Packaging information：

(1) Configuration



※Carrier tape width : D



User direction of feed

(2) Dimensions

Unit:mm

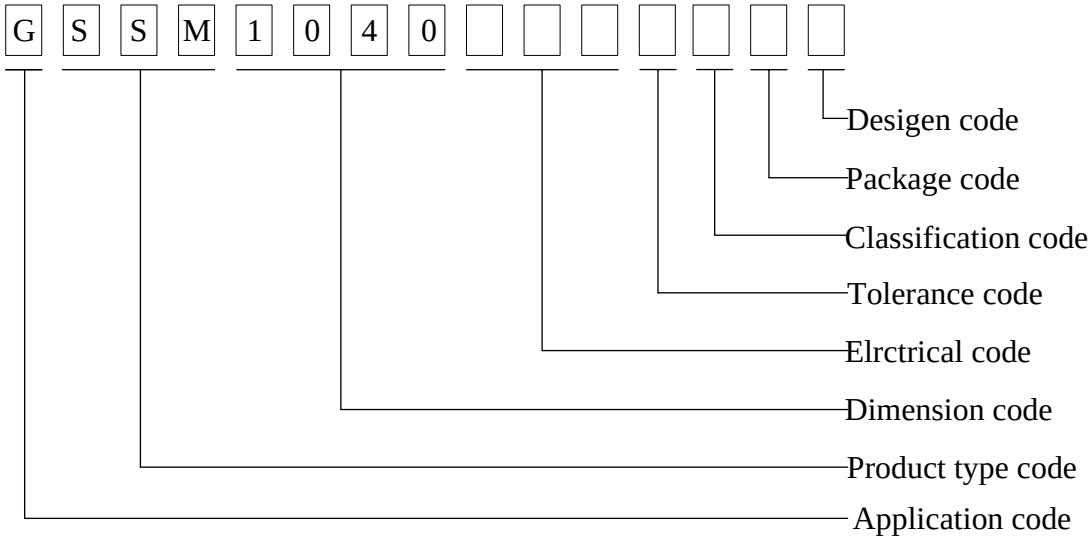
Style	A	B	C	D	G
13 - 24	330	100 ±0.2	$13^{+0.5}_{-0.2}$	24	24.4^{+2}_{-0}

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM1040□□□□2□U		
		REV.	20201111-A	PAGE	7

Ⅶ．Drawing number expression：



Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T / R (Reel package)	500 PCS	

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM0402□□□□0□D		
		REV.	20201111-A	PAGE	8

Ⅷ. Reliability test：

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125±2℃ 2.Time:96±2 hours.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
2.Temperature Cycling	JESD22-A 104	1.Temperature: -55℃ ~ +125℃ 2.Number of cycle:100 cycle 3.Dwell time:30 minutes	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature：85±2 ℃ 2.Humidity: 85% RH. 3.Time:96±2 Hours	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
4.Operational Life	JESD22-A 108	1.Temperature: 125℃(Temp. rise included) 2.Time:96±2 hours. 3.Rated current：	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
5.External Visual	JESD22-B 101 & MIL-STD-883 Method 2009	Inspect product constructions, marking and workmanship.	1.No pollution on the surface of products. 2.Clear marking. 3.No crack.
6.Physical Dimensions	JESD22-B 100	Verify physical dimensions to the applicable product detail specification.	Per product specification standard
7.Resistance to solvents	MIL-STD-202 Method 215	Immerse into solvent for 3±0.5 minutes & brush 10 times for 3 cycles.	1.No body change in apperarance. 2.No marking blurred. 3.Inductance shall not change more than ±20%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210 & J-STD020D.1	1.Highest temperature：260±5℃. 2.Time（temp.≧ 217℃）：60~150 Second. 3.IR reflow times：3 times.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 second. 2.Saturation current：	Inductance shall not drop more than 30% typ.
11.Over load	JIS C 6436 & User SPEC.	1.Applied one and half rated current for a period of 5 minutes. 2.Rated current：	No electrical or mechanical damage
12.Temperature Rise Current	JIS C 6436 & User SPEC.	1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current：	Surface temperature rise is less than 40℃ typ.
13.Solderability Test	J-STD-002 & JESD22-B 102	1.Baking in pre-testing：150±5℃ / 16Hours±30 min. 2.Peak temperature：240±5℃ 3.Time（temp.≧217℃）：60~150 second. 4.IR reflow times：1 times.	More than 95% soldering coverage min on terminations.
14.Electrical Characteriazation	MIL-STD-202 Method 304 & User SPEC.	1.Operating temperature：-55℃~125℃ 2.Room temperature：25℃.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time：6 time (Every side of sample drop 2 time)	1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage.
16.Terminal Strength Test	IEC 60068-2-21	1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.