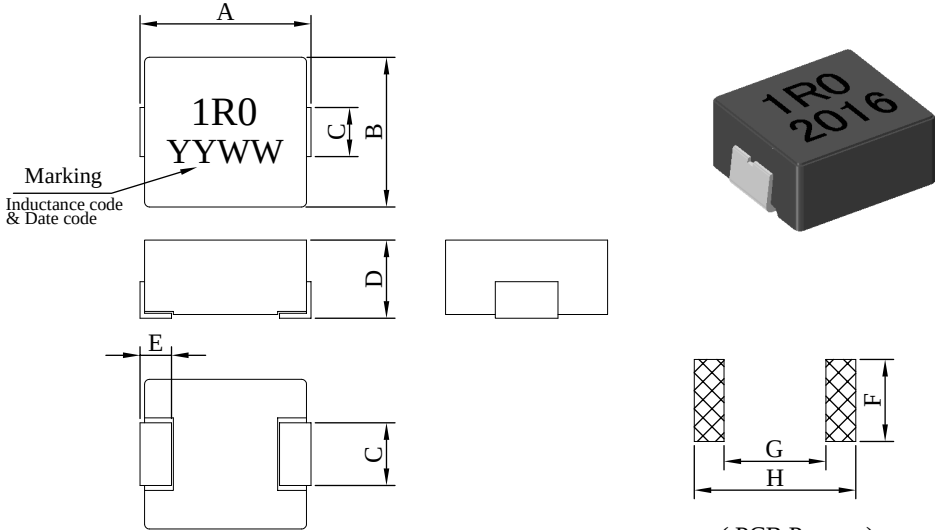


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		GSSM0650□□□□2□U		
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I . Configuration and dimensions :



Unit : mm

A	B	C	D	E	F	G	H
7.30 ±0.30	6.60 ±0.30	3.00 ±0.3	4.80 ±0.2	1.80 ±0.3	3.50 ref.	2.50 ref.	8.40 ref.

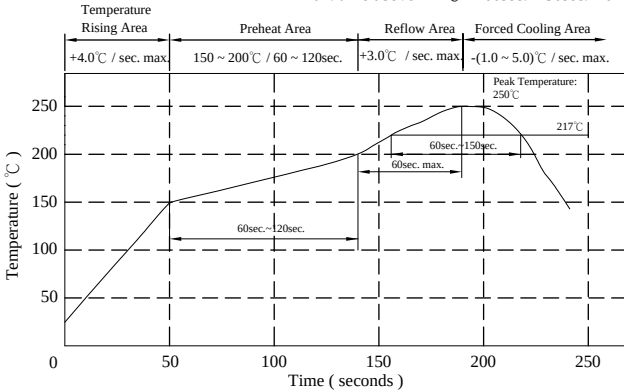
II . Description :

- a . Powder molding construction
- b . Magnetically shielded
- c . Wire : Polyester wire or equivalent
- d . Products comply with RoHS' requirements
- e . Halogen free

Peak temp. : 250℃ max.
Max. peak temp. - 5℃ : 30sec. max.
Max. time above 217℃ : 60sec.~150sec. max.

III . General specification :

- a . Operating temp. : -40℃ ---- +125℃
(Temp. rise included)
- b . Resistance to solder heat : 260℃.10 sec.



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SPECIFICATION FOR APPROVAL

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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Isat (A) typ.	Irms (A) typ.	RDC (m Ω)	
				max.	typ.
GSSM0650R10Y2AU	0.10 $\pm$ 30%	65.00	32.00	0.78	0.65
GSSM0650R11Y2AU	0.11 $\pm$ 30%	65.00	32.00	0.78	0.65
GSSM0650R15Y2AU	0.15 $\pm$ 30%	50.00	30.00	1.70	1.30
GSSM0650R22M2AU	0.22 $\pm$ 20%	35.00	25.00	1.90	1.60
GSSM0650R33M2AU	0.33 $\pm$ 20%	32.00	25.00	3.00	2.50
GSSM0650R40M2AU	0.40 $\pm$ 20%	31.00	23.00	3.70	3.10
GSSM0650R47M2AU	0.47 $\pm$ 20%	30.00	22.00	3.90	3.50
GSSM0650R56M2AU	0.56 $\pm$ 20%	27.00	20.00	4.20	3.60
GSSM0650R60M2AU	0.60 $\pm$ 20%	25.00	19.00	4.30	3.80
GSSM0650R68M2AU	0.68 $\pm$ 20%	24.00	18.00	4.50	4.00
GSSM0650R82M2AU	0.82 $\pm$ 20%	22.00	16.50	4.90	4.60
GSSM06501R0M2AU	1.00 $\pm$ 20%	20.00	15.00	6.50	6.10
GSSM06501R2M2AU	1.20 $\pm$ 20%	18.00	14.00	7.50	6.70
GSSM06501R5M2AU	1.50 $\pm$ 20%	16.50	12.00	9.00	8.60
GSSM06501R8M2AU	1.80 $\pm$ 20%	15.00	12.00	11.00	9.50
GSSM06502R2M2AU	2.20 $\pm$ 20%	14.00	10.00	12.00	11.20
GSSM06503R3M2AU	3.30 $\pm$ 20%	12.00	8.00	20.90	19.00
GSSM06504R7M2AU	4.70 $\pm$ 20%	10.00	6.50	30.80	28.00
GSSM06504R9M2AU	4.90 $\pm$ 20%	9.50	6.30	38.00	32.00

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SPECIFICATION FOR APPROVAL

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PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		GSSM0650□□□□2□U		
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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Isat (A) typ.	Irms (A) typ.	RDC ($m\Omega$)	
				max.	typ.
GSSM06505R6M2AU	5.60 $\pm$ 20%	9.00	6.00	49.00	43.50
GSSM06506R8M2AU	6.80 $\pm$ 20%	8.50	5.50	51.50	46.00
GSSM06508R2M2AU	8.20 $\pm$ 20%	8.00	5.00	63.00	56.00
GSSM0650100M2AU	10.00 $\pm$ 20%	7.50	4.00	69.00	60.00
GSSM0650120M2AU	12.00 $\pm$ 20%	6.70	3.80	80.00	68.00
GSSM0650150M2AU	15.00 $\pm$ 20%	6.00	3.50	92.00	81.00
GSSM0650220M2AU	22.00 $\pm$ 20%	5.50	2.50	170.00	140.00
GSSM0650330M2AU	33.00 $\pm$ 20%	3.50	2.00	200.00	173.00
GSSM0650420M2AU	42.00 $\pm$ 20%	2.80	2.00	245.00	212.00
GSSM0650470M2AU	47.00 $\pm$ 20%	2.70	1.90	330.00	290.00
GSSM0650560M2AU	56.00 $\pm$ 20%	2.10	1.60	396.00	342.00
GSSM0650680M2AU	68.00 $\pm$ 20%	2.00	1.20	445.00	386.00

- 1). Electrical specifications at 25°C
- 2). Measured frequency of inductance is 100 kHz / 1V
- 3). Isat base on $\Delta L/L0A=30\%$ typ.
- 4). Irms base on Temp. rise 40°C typ.

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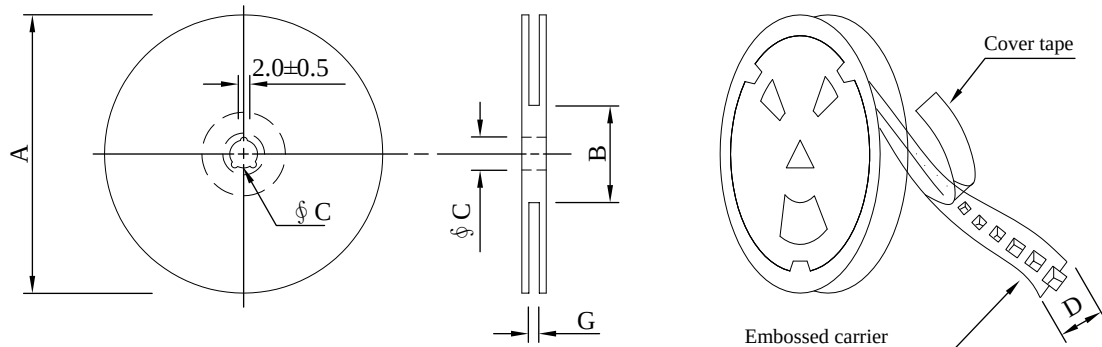
SPECIFICATION FOR APPROVAL

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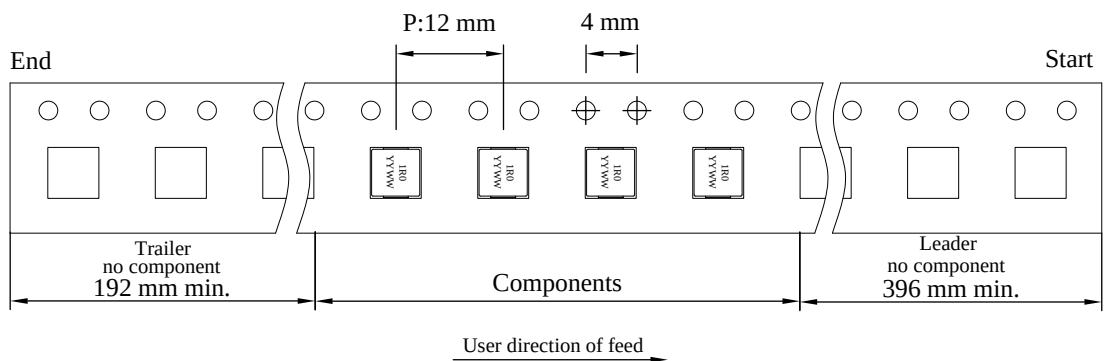
PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		GSSM0650□□□□2□U		
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V . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:mm

Style	A	B	C	D	G
13 - 16	330	100 ±2	13 ^{+0.5} _{-0.2}	16	16.4 ⁺² ₋₀

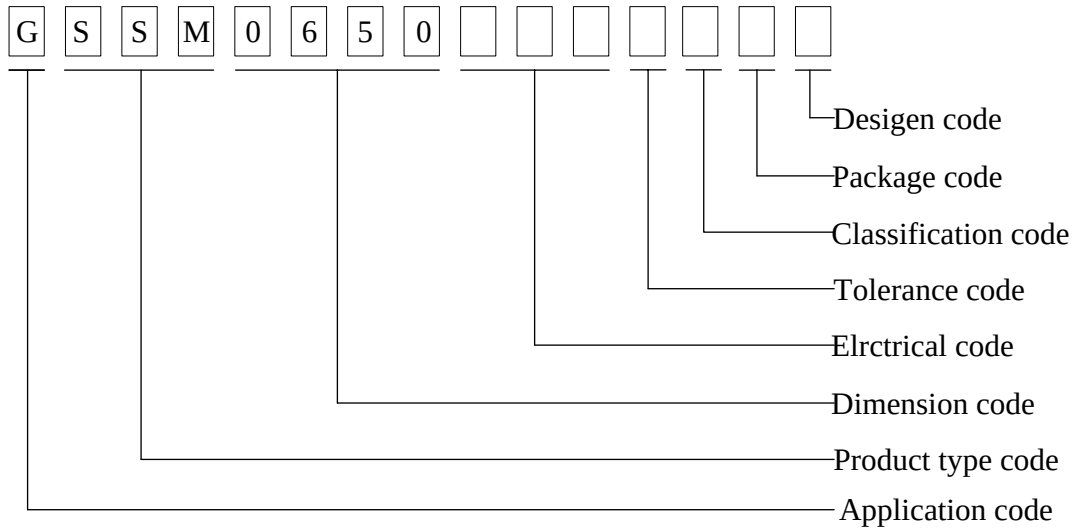
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SPECIFICATION FOR APPROVAL

REF.:

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		GSSM0650□□□□2□U		
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VI . Drawing number expression :



Package Information

Code	Inner package	Inner package Q'TY	Remark
A	T / R (Reel package)	800 PCS	

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SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	GSSM0650□□□□2□U		
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VII . 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: -40℃ ~ +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 apperaranace. 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 2.Sweep time : 20 min 3.Acceleration : 5g 4.Direction : X , Y , Z 5.Number of sweep : 6 time/axis		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 : 250±5℃. 2.Time (temp. ≥ 217℃) : 60~150 Second. 3.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.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 : -40℃~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.	

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