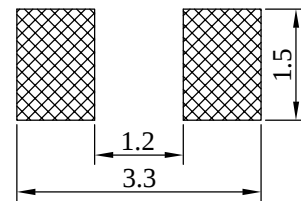
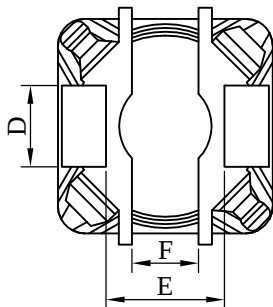
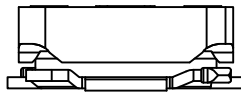
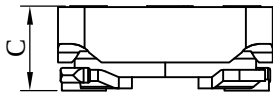
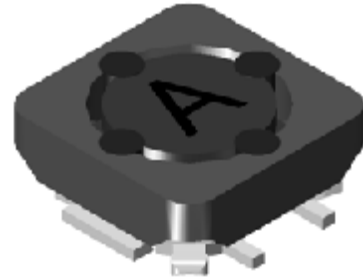
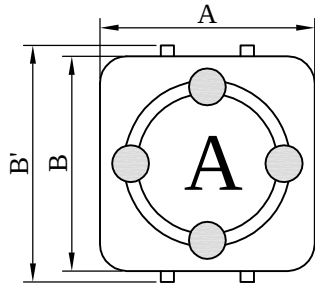


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□		
		REV.	20160727-A	PAGE	1	

I . Configuration and dimensions :



(PCB Pattern)

Unit : m/m

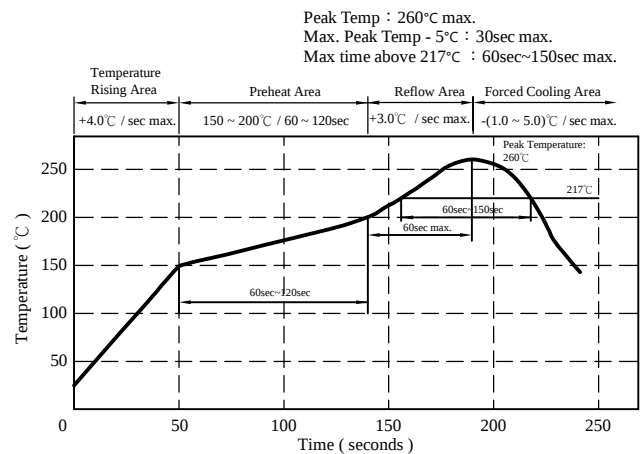
A	B	B'	C	D	E	F
2.90±0.1	2.90±0.1	3.20 max.	1.20 max.	1.10 typ.	1.60 typ.	0.90 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 0.04g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free available

III . General specification :

- a . Storage temp. : -40°C ----+125°C
- b . Operating temp. : -40°C----+125°C
(Temp. rise included.)
- c . Resistance to solder heat : 260°C.10 secs.



AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□		
		REV.	20160727-A	PAGE	2	

IV . Electrical characteristics :

DWG No.	Inductance (μ H)	RDC ($m\Omega$)		SRF (MHz) typ.	Isat (mA) typ.	Irms (mA) typ.	Marking
		typ.	max.				
CS30121R0YS□-□□□	1.0 $\pm$ 30%	77.0	100.0	160.0	1500	1500	A
CS30122R2YS□-□□□	2.2 $\pm$ 30%	146.0	175.0	100.0	1000	1100	C
CS30123R3YS□-□□□	3.3 $\pm$ 30%	220.0	265.0	80.0	850	900	E
CS30124R7YS□-□□□	4.7 $\pm$ 30%	280.0	330.0	64.0	700	800	F
CS30126R8YS□-□□□	6.8 $\pm$ 30%	400.0	480.0	50.0	550	650	G
CS3012100MS□-□□□	10.0 $\pm$ 20%	650.0	780.0	45.0	450	500	H
CS3012150MS□-□□□	15.0 $\pm$ 20%	800.0	950.0	40.0	400	450	I
CS3012220MS□-□□□	22.0 $\pm$ 20%	1350.0	1590.0	27.5	300	330	J

- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Condition. : 100KHz / 0.1V
- 5). Isat base on $\Delta L / L0A=35\%$ typ.
- 6). Irms base on Temp. rise 40°C typ.

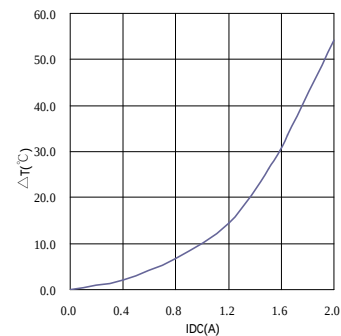
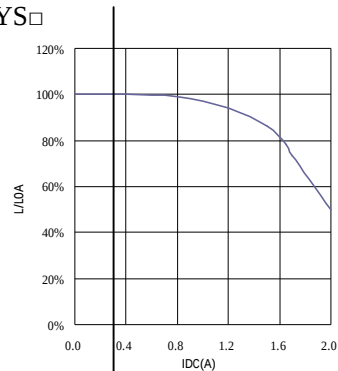
SPECIFICATION FOR APPROVAL

REF. :

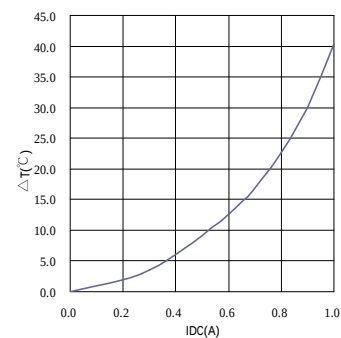
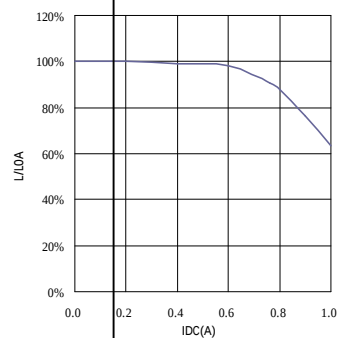
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□		
		REV.	20160727-A	PAGE	3	

V . Curve :

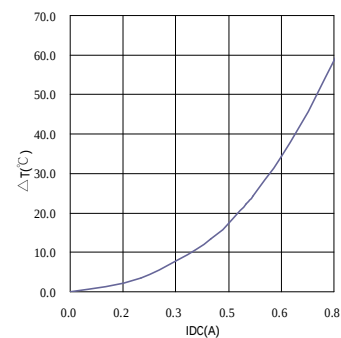
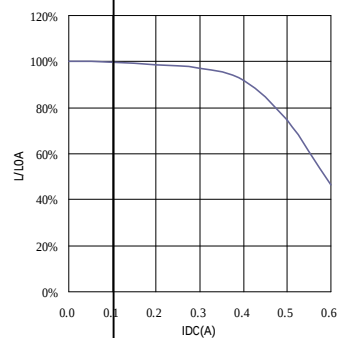
CS30121R0YS□



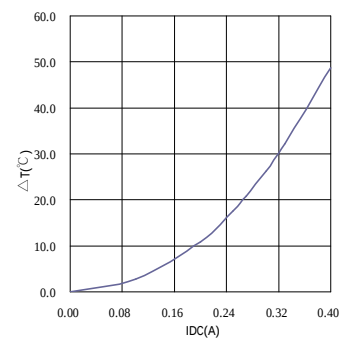
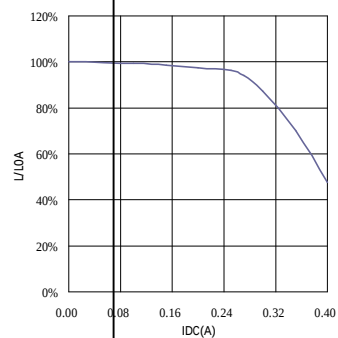
CS30123R3YS□



CS3012100MS□



CS3012220MS□



AR-001C

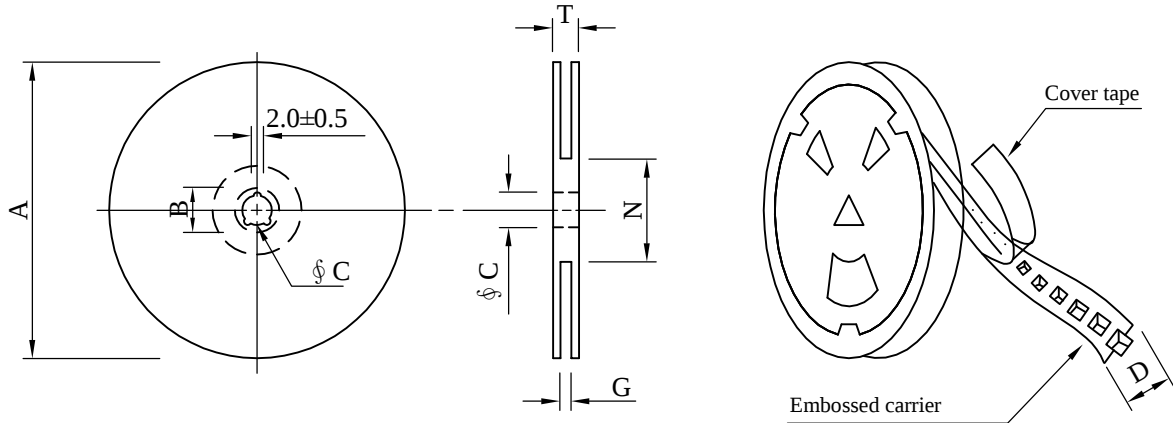
SPECIFICATION FOR APPROVAL

REF. :

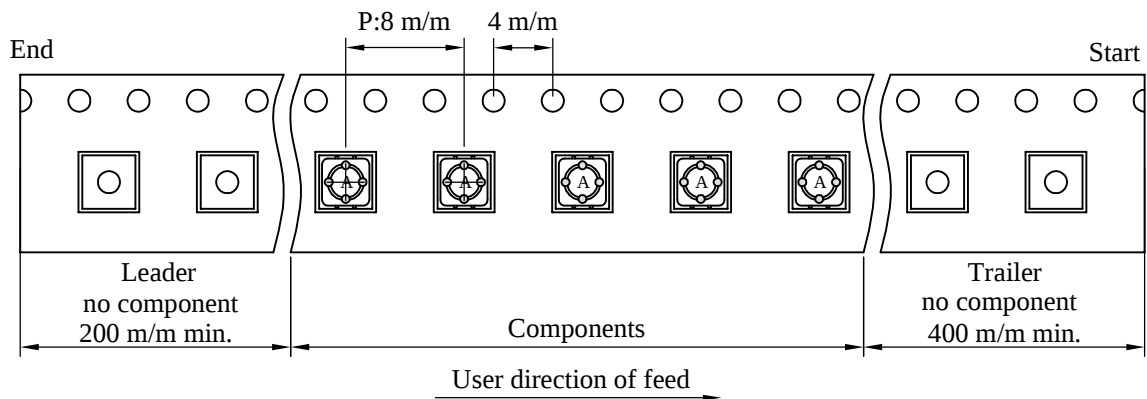
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□	
		REV.	20160727-A	PAGE	4

VI . Packaging information :

(1) Configuration



※ Carrier tape width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 12	330	21±0.8	13±0.5	12	14 ⁺⁰	50 ⁻⁰	22.4

(3) Q'TY & G.W. Per package

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	3,000	570	13 - 12	24,000	5.8	38 x 37 x 22

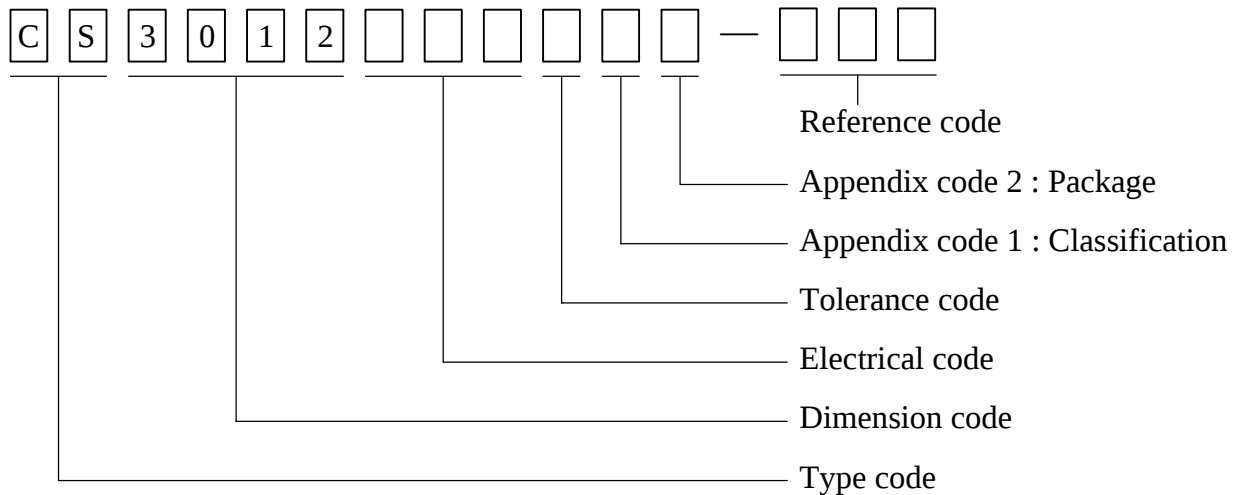
AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□	
		REV.	20160727-A	PAGE	5

VII . Drawing number expression :



Appendix code 1 : Product Classification

Appendix code 2 : Package Information

Code	Inner package	Cover tape	Carrier tape	Bag	Package Q'TY	Remark
B	T /R (Reel package)	Adhesive	Non-antistatic	Antistatic	3000 pcs	

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CS3012□□□□S□-□□□		
		REV.	20160727-A	PAGE	6

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: -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 °C 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 apperance. 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 35% 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 : -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.

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CS3012□□□□S□-□□□		
		REV.	20160727-A	PAGE	7	
IX . Change history :						
DATE/REV.	DISCRIPTION	DRAWN	CHECKED	APPROVED		
20160727-A	Released	Miz	Leo	Nick		

AR-001C

