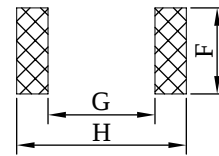
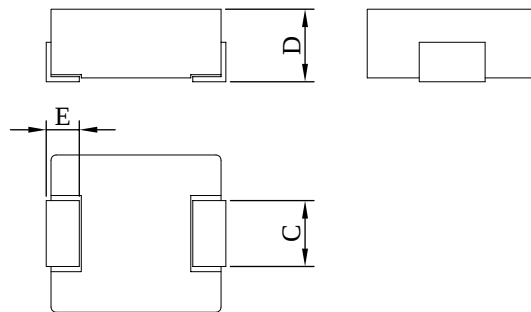
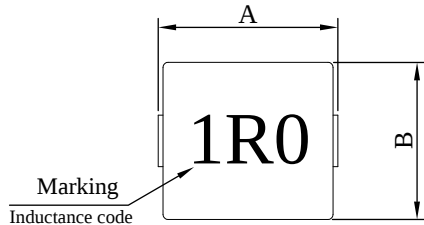


SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		EHI0420□□□□S□-□□□			
		REV.	20210309-A	PAGE	1		

I . Configuration and dimensions :



(PCB Pattern)

Unit : mm

A	B	C	D	E	F	G	H
4.45 ±0.25	4.06 ±0.25	2.00 ±0.2	1.80 ±0.2	0.76 ±0.3	2.30 ref.	2.20 ref.	5.20 ref.

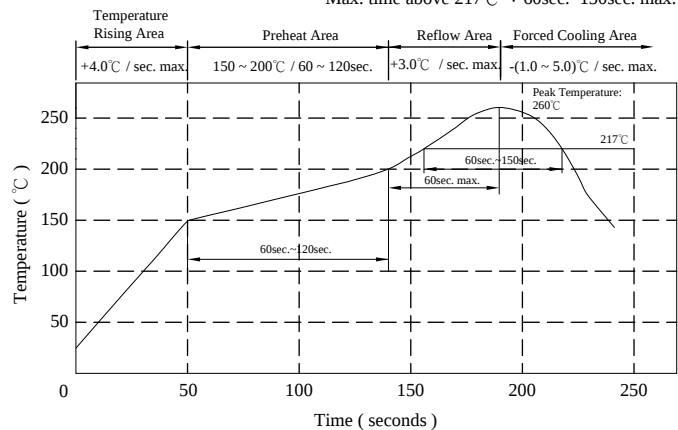
II . Description :

- a . Powder molding construction
- b . Magnetically shielded
- c . Wire : Polyester wire or equivalent
- d . Product weight : 0.18g (ref.)
- e . Products comply with RoHS' requirements
- f . Halogen free

Peak temp. : 260°C max.
Max. peak temp. - 5°C : 30sec. max.
Max. time above 217°C : 60sec.~150sec. max.

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 sec.



AR-001C

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		EH10420□□□□S□-□□□		
		REV.	20210309-A	PAGE	2	

IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Isat (A) typ.	Irms (A) typ.	RDC ($m\Omega$)	
				max.	typ.
EH10420R10YS□-□□□	$0.10 \pm 30\%$	35.00	14.00	4.0	3.2
EH10420R15YS□-□□□	$0.15 \pm 30\%$	31.00	14.00	5.0	4.2
EH10420R22YS□-□□□	$0.22 \pm 30\%$	24.00	13.00	7.3	6.6
EH10420R33MS□-□□□	$0.33 \pm 20\%$	18.00	10.00	8.6	7.8
EH10420R36MS□-□□□	$0.36 \pm 20\%$	15.00	9.00	12.0	8.7
EH10420R47MS□-□□□	$0.47 \pm 20\%$	12.00	8.00	14.0	11.2
EH10420R56MS□-□□□	$0.56 \pm 20\%$	10.00	7.30	16.0	13.5
EH10420R68MS□-□□□	$0.68 \pm 20\%$	10.00	7.00	19.0	16.0
EH104201R0MS□-□□□	$1.00 \pm 20\%$	8.50	5.00	27.0	22.0
EH104201R5MS□-□□□	$1.50 \pm 20\%$	7.00	4.50	42.0	34.8
EH104202R2MS□-□□□	$2.20 \pm 20\%$	6.00	4.00	61.0	51.0
EH104203R3MS□-□□□	$3.30 \pm 20\%$	4.00	3.50	76.0	69.0
EH104204R7MS□-□□□	$4.70 \pm 20\%$	3.50	2.60	105.0	95.0
EH104205R6MS□-□□□	$5.60 \pm 20\%$	3.00	2.20	125.0	112.0
EH104206R8MS□-□□□	$6.80 \pm 20\%$	2.80	2.10	172.0	150.0
EH10420100MS□-□□□	$10.00 \pm 20\%$	2.30	1.80	243.0	215.0
EH10420150MS□-□□□	$15.00 \pm 20\%$	1.90	1.50	374.0	325.0
EH10420220MS□-□□□	$22.00 \pm 20\%$	1.40	1.20	500.0	470.0

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

AR-001C

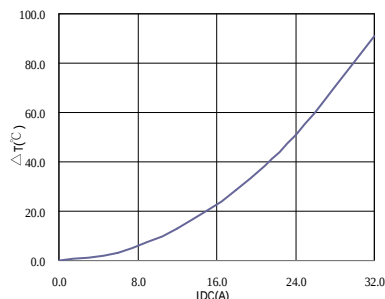
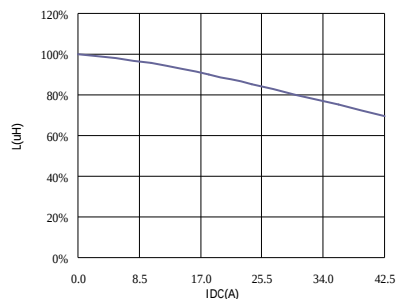
SPECIFICATION FOR APPROVAL

REF :

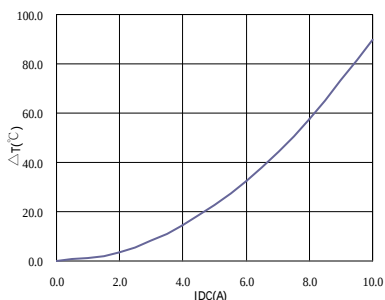
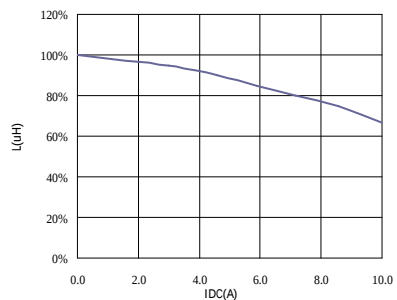
PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		EHI0420□□□□S□-□□□		
		REV.	20210309-A	PAGE	3	

V . Curve :

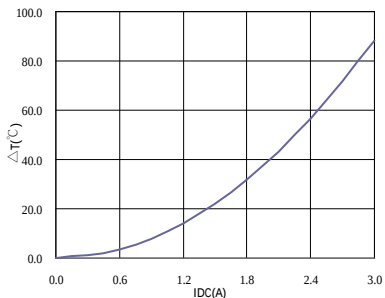
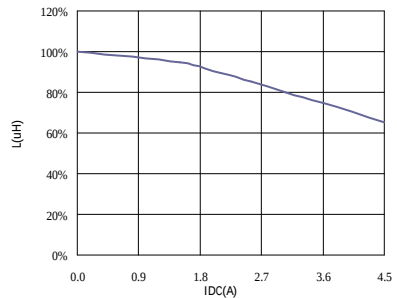
EHI0420R10YS□



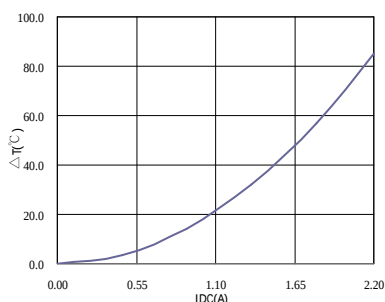
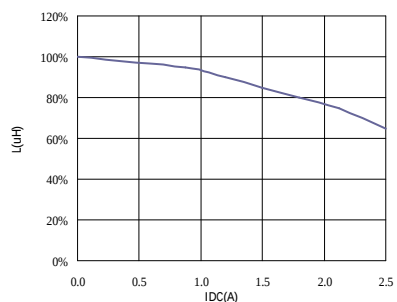
EHI04201R0MS□



EHI0420100MS□



EHI0420220MS□



AR-001A



千如電子集團
ABC-ATEC ELECTRONICS GROUP

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.	EH10420□□□□S□-□□□		
		REV.	20210309-A	PAGE	4

VI . Packaging information :

(1) Configuration

※Carrier tape width : D

End P:8 mm 4 mm Start

Leader
no component
192 mm min.

Components

Trailer
no component
400 mm min.

User direction of feed →

(2) Dimensions Unit:mm

Style	A	B	C	D	G
13 - 12	330	100 ±0.2	13 ^{+0.5} _{-0.2}	12	12.4 ⁺² ₋₀

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

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (g)	Style	Q'TY (pcs)	G.W. (kg)	Size (cm)
B	3,000	975	13 - 12	36,000	18.0	38 x 37 x 22

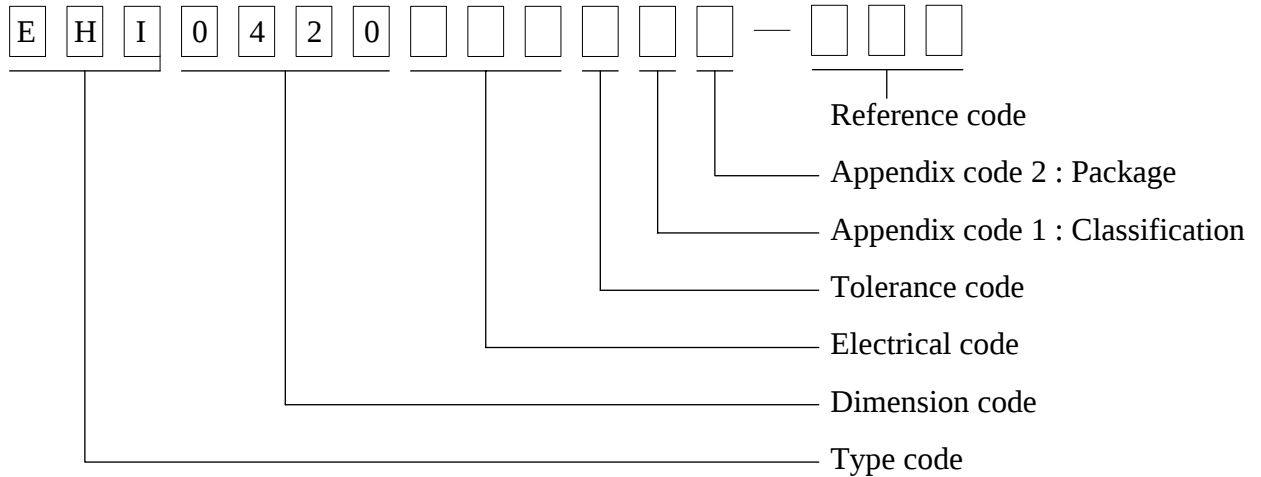
AR-001A

SPECIFICATION FOR APPROVAL

REF :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		EHI0420□□□□S□-□□□		
		REV.	20210309-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)	Heat seal	Antistatic	Antistatic	3,000 pcs	

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded Smd Power Inductor	ABC'S DWG NO.		EH10420□□□□S□-□□□		
		REV.	20210309-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 cycles 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 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 Seconds. 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 seconds. 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 seconds. 4.IR reflow times : 1 time.		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 times (Every side of sample drop 2 times)		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.		EH10420□□□□S□-□□□		
		REV.	20210309-A	PAGE	7	
IX . Change history :						
DATE/REV.	DISCRIPTION	DRAWN	CHECKED	APPROVED		
20210309-A	New Release	Lijuan Y	Cyrus	Roger		

AR-001C