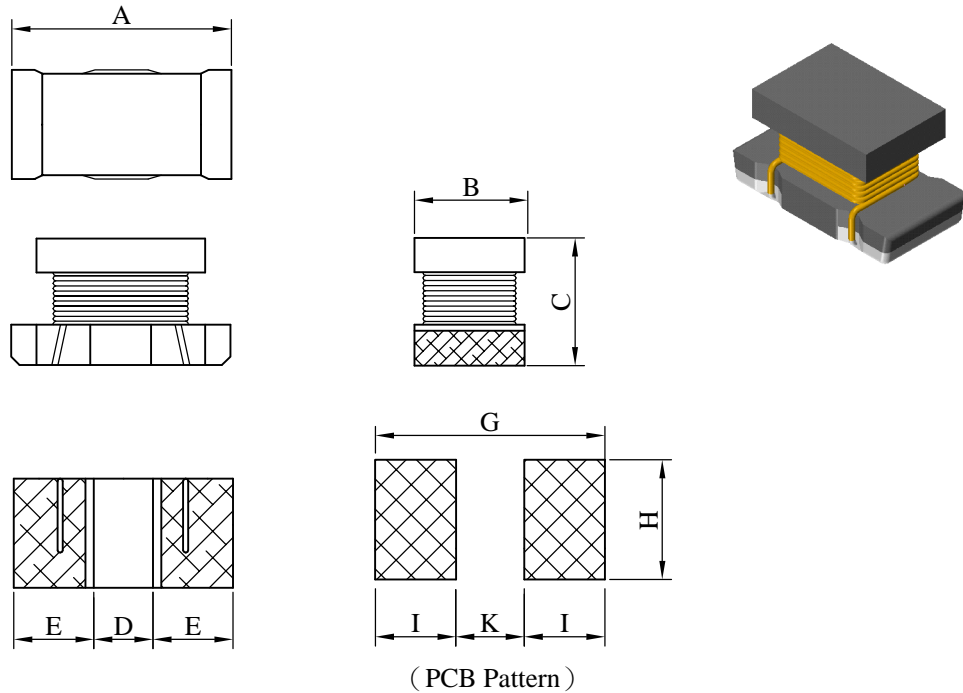


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ3216□□□□3□-□□□		
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I . Configuration and dimensions :



Unit : mm

A	B	C	D	E	G	H	I	K
3.20 ±0.30	1.60 ±0.30	1.85 ±0.30	1.10 typ.	0.90 min.	3.80 ref.	2.00 ref.	1.50 ref.	0.80 ref.

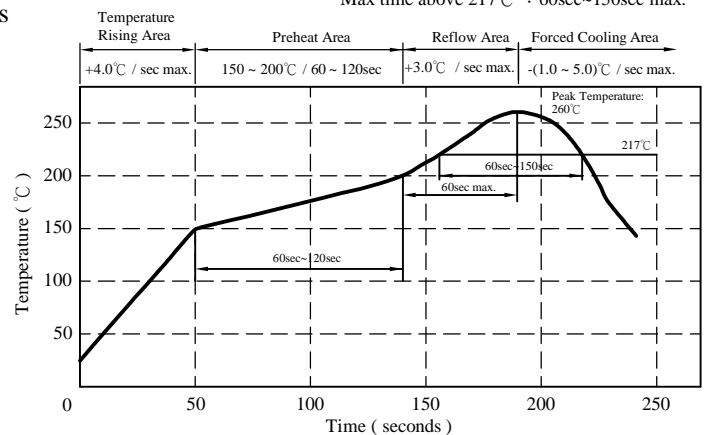
II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 0.032 g (ref.)
- d . Moisture sensitivity Level 1
- 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 secs.



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SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ3216□□□□3□-□□□		
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IV . Electrical characteristics :

DWG. No.	Inductance (μ H)	Test Freq (Hz) L	SRF (MHz) min.	RDC (Ω) max.	IDC (mA) max.
SQ3216R12M3□-□□□	0.12 \pm 20%	1k	250.0	0.112	970
SQ3216R22M3□-□□□	0.22 \pm 20%	1k	250.0	0.140	850
SQ3216R33M3□-□□□	0.33 \pm 20%	1k	300.0	0.160	800
SQ3216R47M3□-□□□	0.47 \pm 20%	1k	180.0	0.210	700
SQ32161R0M3□-□□□	1.00 \pm 20%	1k	100.0	0.392	510
SQ32162R2M3□-□□□	2.20 \pm 20%	1k	50.0	0.574	430
SQ32164R7M3□-□□□	4.70 \pm 20%	1k	31.0	0.910	340
SQ32166R8M3□-□□□	6.80 \pm 20%	1k	25.0	1.300	280
SQ3216100K3□-□□□	10.00 \pm 10%	1k	20.0	1.820	230
SQ3216220K3□-□□□	22.00 \pm 10%	1k	14.0	4.200	160
SQ3216270K3□-□□□	27.00 \pm 10%	1k	13.0	4.500	150
SQ3216470K3□-□□□	47.00 \pm 10%	1k	10.0	11.200	100
SQ3216101K3□-□□□	100.00 \pm 10%	1k	7.0	16.800	80

- 1). Electrical specifications at 25°C
- 2). IDC base on Temp. rise 40°C max.& Δ L/LOA = 10% max.

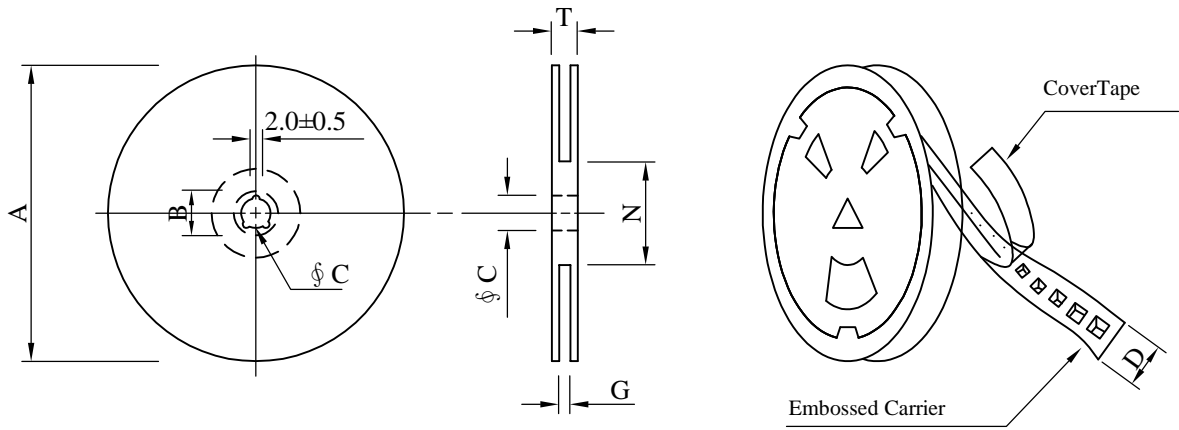
SPECIFICATION FOR APPROVAL

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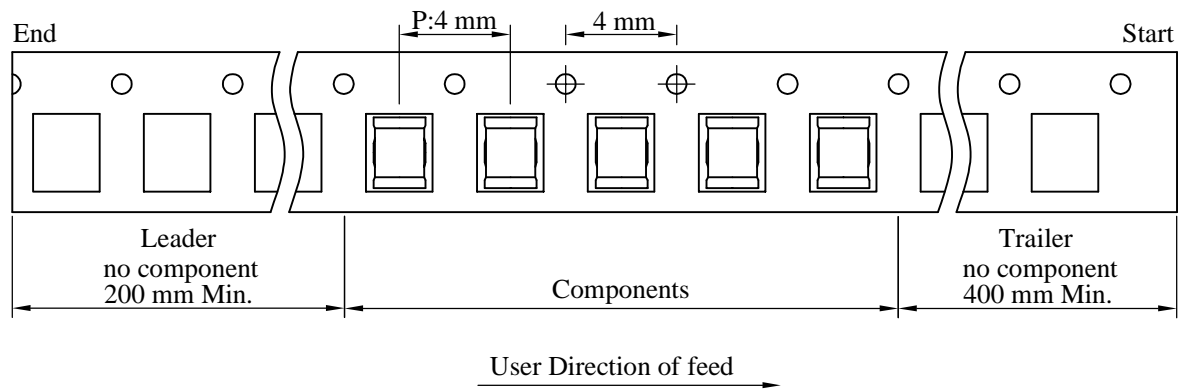
PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ3216□□□□3□-□□□		
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V - I . Packaging information :

(1) Configuration



※Carrier Tape Width : D



(2) Dimensions

Unit:mm

Style	A	B	C	D	G	N	T
07(S) - 08	183	21±0.8	13	8	10 ⁺⁰	50 ⁻⁰	12.5

(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	2,000	80	07(S) - 08	100,000	7.50	42 x 41 x 24

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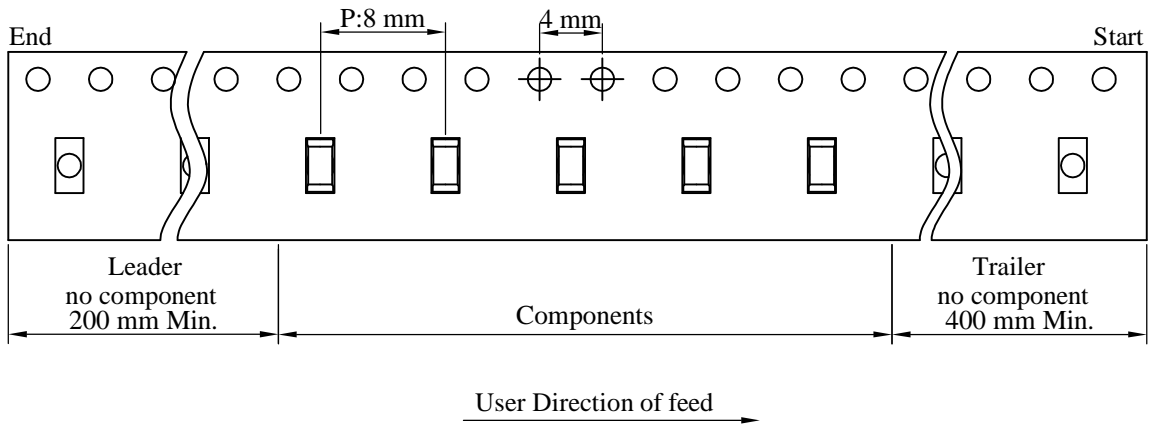
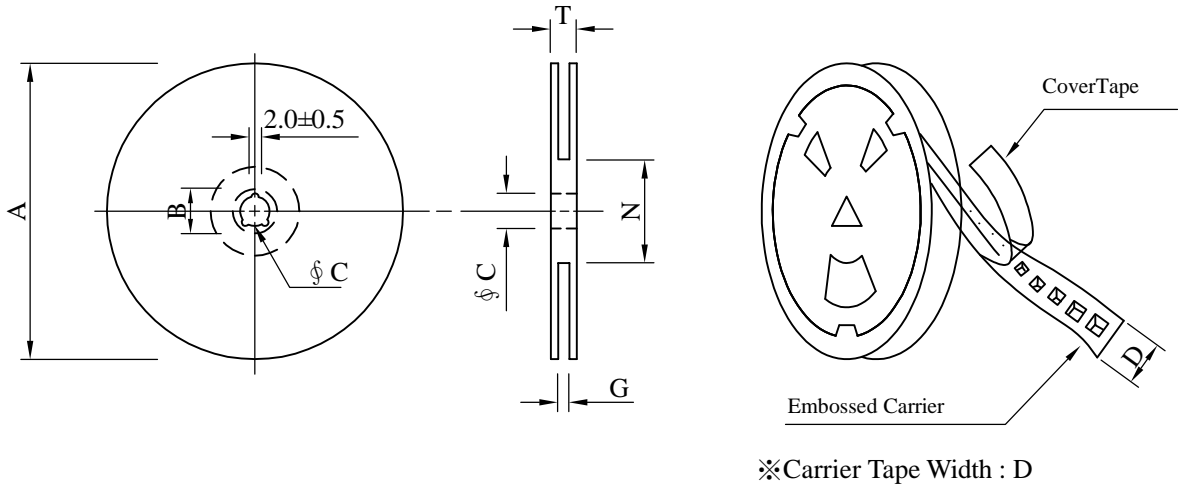
SPECIFICATION FOR APPROVAL

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V - II . Packaging information :

(1) Configuration



(2) Dimensions

Unit:mm

Style	A	B	C	D	G	N	T
13 - 12	330	21±0.8	13±0.5	12	14 ⁺⁰	50 ⁻⁰	18.4

(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)
C	3,000	458	13 - 12	24,000	4.90	38 x 37 x 22

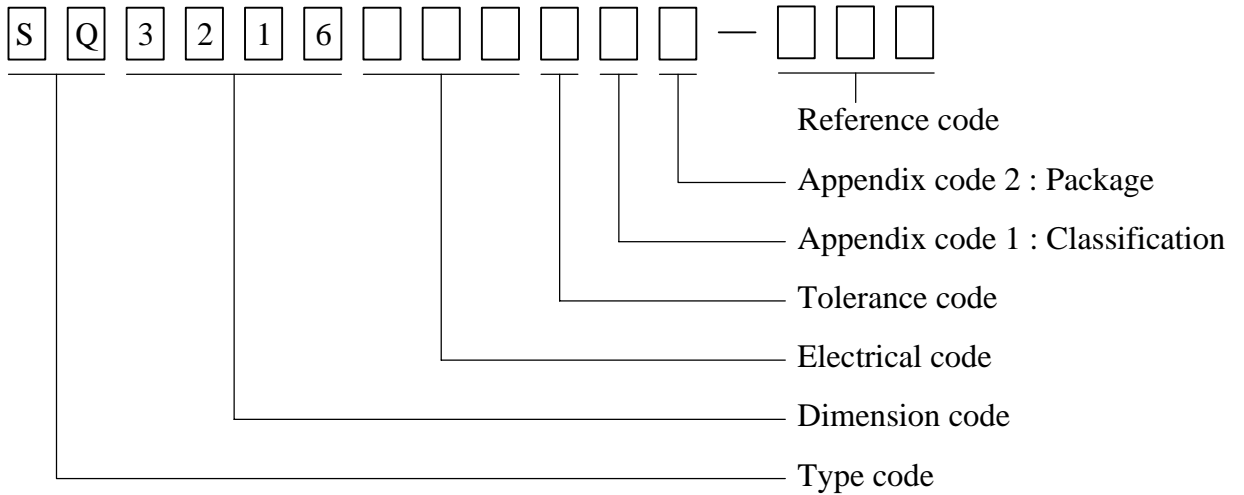
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VI . Drawing number expression :



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)	UCT	Non-antistatic	Antistatic	2,000 pcs	
C	T/R (Reel package)	UCT	Non-antistatic	Antistatic	3,000 pcs	

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	SMD Power Inductor	ABC'S DWG NO.	SQ3216□□□□3□-□□□		
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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 ±10%.
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 ±10%.
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 ±10%.
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 ±10%.
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 appearance. 2.No marking blurred. 3.Inductance shall not change more than ±10%.
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 ±10%.
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 ±10%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 seconds. 2.Saturation current	Inductance shall not drop more than 10% max.
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℃ max.
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 ±10%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. pcb and dropped down from a heigh of 1m 2.Drop total time : 6 times. (Every side ofsample 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.

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