SPECIFICATION FOR APPROVAL

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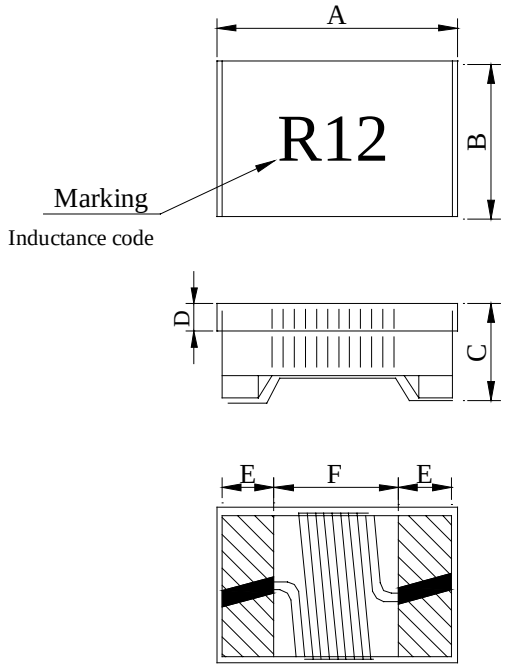
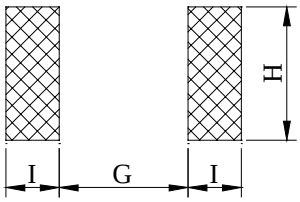
PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
		ABC'S ITEM NO.	

Ⅰ . CONFIGURATION & DIMENSIONS：

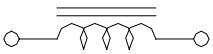


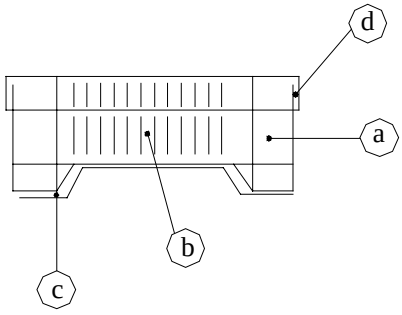
A	:	2.00±0.2	m/m
B	:	1.25±0.2	m/m
C	:	1.20±0.2	m/m
D	:	0.50	m/m
E	:	0.50	m/m
F	:	1.00	m/m
G	:	0.80	m/m
H	:	1.40	m/m
I	:	0.60	m/m



(PCB Pattern)

Ⅱ . SCHEMATIC DIAGRAM：





Ⅲ . MATERIALS：

a . Core：Ceramic

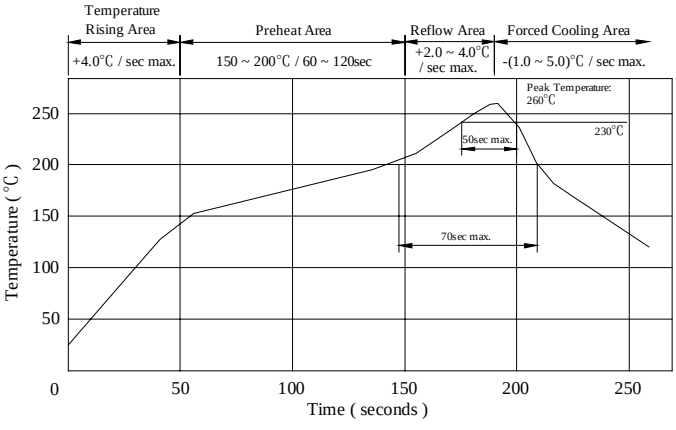
b . WIRE ：Enamelled copper wire (class H)

c . Terminal：Mo / Mn + Ni + Au

d . Encapsulate：Epoxy

e . Remark：Lead content 200ppm max.
include ceramic

Peak Temp：260℃ max.
Max time above 230℃ ：50sec max.
Max time above 200℃ ：70sec max.



Ⅳ . GENERAL SPECIFICATION：

a . Temp rise ：15℃ max.

b . Rated current：Current cause inductance drop within 10% max.

c . Storage temp.：-40℃ ----+125℃

d . Operating temp.：-40℃----+125℃

SPECIFICATION FOR APPROVAL

PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
		ABC'S ITEM NO.	

Ⅴ．ELECTRICAL CHARACTERISTICS：

DWG No.	Inductance (nH)	Q min	Test Freq. (MHz)		SRF (MHz) min	RDC (Ω) max	IDC (mA) max
			L	Q			
SW20222N2DL□	2.2±0.3	50	250	1000	6000	0.06	800
SW20222N7DL□	2.7±0.3	35	250	1000	6000	0.08	800
SW20223N3DL□	3.3±0.3	60	250	1000	6000	0.08	800
SW20223N9DL□	3.9±0.3	60	250	1000	6000	0.06	600
SW20224N7DL□	4.7±0.3	60	250	1000	5800	0.06	600
SW20225N6JL□	5.6± 5%	60	250	1000	5800	0.08	600
SW20226N8JL□	6.8± 5%	60	250	1000	5500	0.06	600
SW20228N2JL□	8.2± 5%	60	250	1000	5500	0.06	600
SW202210NJL□	10.0± 5%	60	250	500	4800	0.08	600
SW202212NJL□	12.0± 5%	60	250	500	4100	0.08	600
SW202215NJL□	15.0± 5%	60	250	500	3600	0.08	600
SW202218NJL□	18.0± 5%	60	250	500	3400	0.08	600
SW202222NJL□	22.0± 5%	60	250	500	3300	0.10	600
SW202227NJL□	27.0± 5%	60	250	500	2600	0.12	600
SW202233NJL□	33.0± 5%	60	250	500	2400	0.15	500
SW202239NJL□	39.0± 5%	60	250	500	2100	0.18	500
SW202247NJL□	47.0± 5%	60	200	500	1700	0.15	500
SW202256NJL□	56.0± 5%	60	200	500	1600	0.25	500
SW202268NJL□	68.0± 5%	60	200	500	1450	0.27	500
SW202282NJL□	82.0± 5%	60	150	500	1350	0.32	500
SW2022R10JL□	100.0± 5%	60	150	500	1200	0.43	500
SW2022R12JL□	120.0± 5%	50	150	250	1100	0.48	500
SW2022R15JL□	150.0± 5%	50	100	250	950	0.56	400
SW2022R18JL□	180.0± 5%	50	100	250	900	0.78	400
SW2022R22JL□	220.0± 5%	50	100	250	860	1.00	400
SW2022R27JL□	270.0± 5%	45	100	250	850	1.46	350
SW2022R33JL□	330.0± 5%	45	100	250	800	1.65	300
SW2022R39JL□	390.0± 5%	45	100	250	780	2.20	210

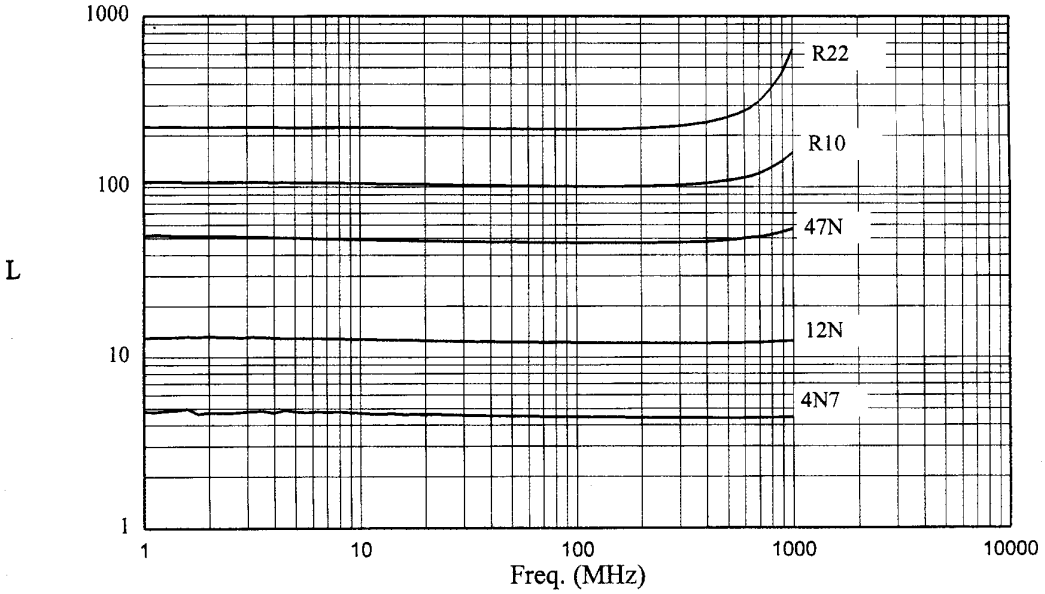
1). □：Packaging Information… A：Bulk B：Taping Reel

SPECIFICATION FOR APPROVAL

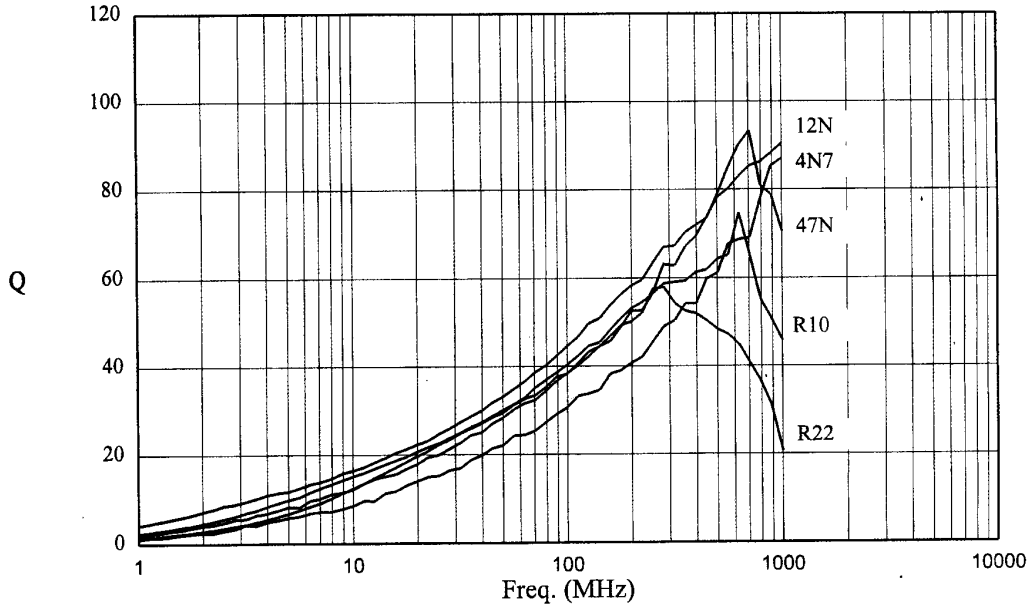
PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
		ABC'S ITEM NO.	

VI . CURVE :

L vs Freq Plot



Q vs Freq Plot

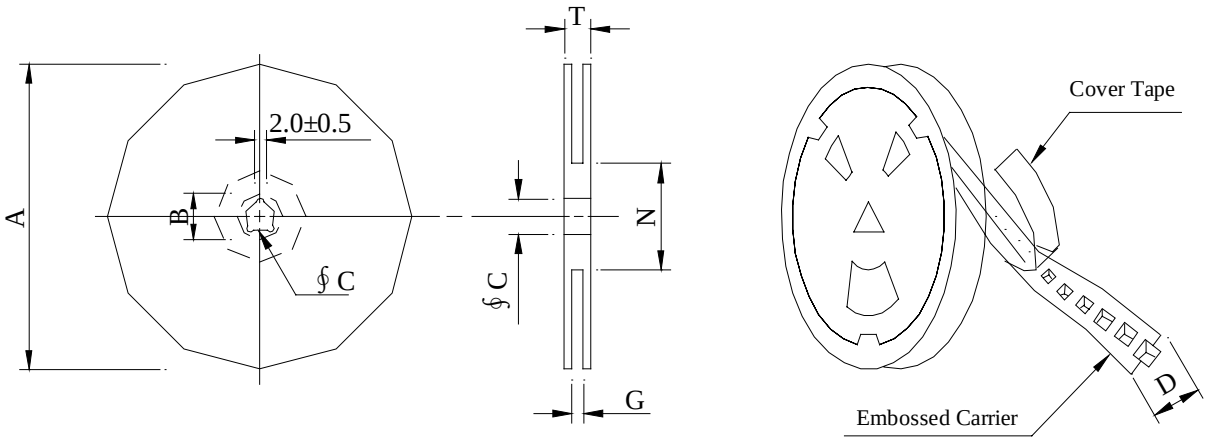


SPECIFICATION FOR APPROVAL

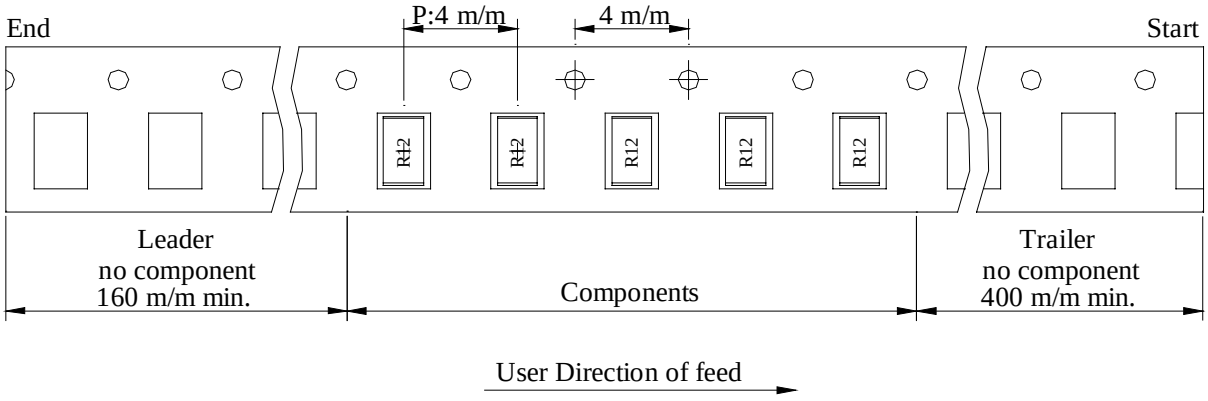
PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
		ABC'S ITEM NO.	

Ⅶ. PACKAGING INFORMATION：

(1) Configuration



※Carrier Tape Width : D



(2) Dimensions Unit:m/m

Style	A	B	C	D	G	N	T
07 - 08	178	21±0.8	13	8	10^{+0}	50^{-0}	12.5

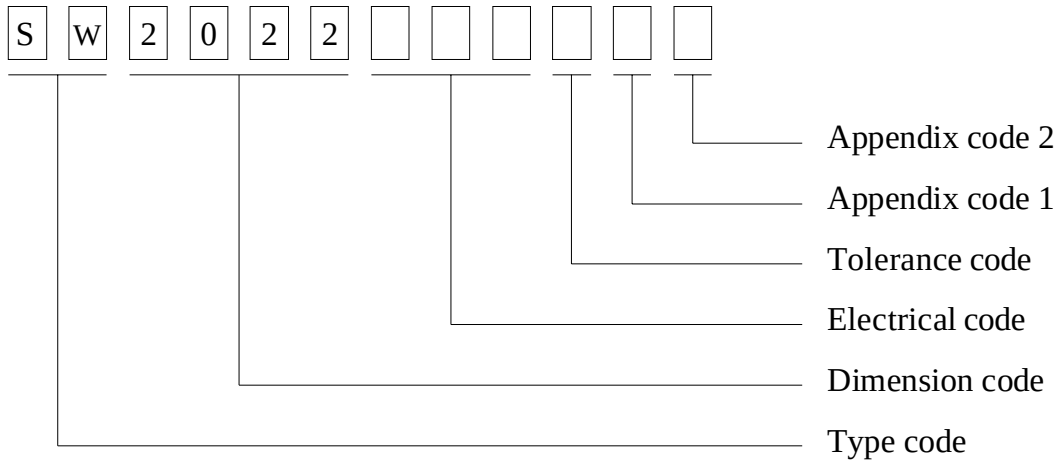
(3) Q'TY & G.W. Per package

Series	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
SW2022	2,000	90	07 - 08	100,000	6.50	41 x 39 x 22

SPECIFICATION FOR APPROVAL

PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
		ABC'S ITEM NO.	

Ⅷ．DWG EXPRESSION：



Appendix code 1：S：Standard products

A K, M R, T Z：Special products

L：Standard Lead Free products

1 ~ 9：Special Lead Free products

Appendix code 2：

Code	Inner package	Inner package Q'TY	Remark
A	Empty	Empty	
B	T / R (Reel package)	2000 pcs	

SPECIFICATION FOR APPROVAL

PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2022□□□□L□
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Ⅸ . RELIABILITY TEST：

Test items	Specifications	Test conditions / Test methods
ELECTRICAL PERFORMANCE TEST		
L	Refer to standard electrical characteristic list	HP-4291A With HP-16193 Test fixture .
Q		HP-4291A With HP-16193 Test fixture.
SRF		HP-8753E
RDC		HP-4338B
Rated currert IDC		Applied the current to coils the inductance change shall be less than 10% to initial value and temperature rise shall not be more than 20℃
Temperature rise test	20℃ max.	1.Applied the allowed DC current for 10 minutes. 2.Temperature measure by digtal surface thermometer .
Over load test	After test, Inductors shall be no evidence of electrical and mechanical damage	Applied 2 times of rated allowed DC current to inductor for a period of five minutes .
Withstanding voltage test	After test, Inductors shall be no evidence of electrical and mechanical damage	500VAC between inductor terminals and center of case for a maximum 1 minute.
Insulation resistance test	1000 MΩ min.	100 VDC between inductor terminals and center case.
MECHANICAL PERFORMANCE TEST		
Vibration test (Low frequency)	1.There shall be no case deformation or change in appearance. 2.Inductance shall not change more than ±5% 3.Q shall not change more than±10%	1.Amplitude：1.5 m/m 2.Frequency：10-55-10Hz/min. 3.Direction ：X,Y,Z 4.Duration ：2HRS/X,Y,Z
Vibration test (Low frequency)		Inductors shall be dropped 10 times from a height of 1m onto 3cm wooden board .
Resistance to soldering heat		Inductors shall be reflowed onto a P.C. board using solder paste. Solder process shall be 230℃ for 20±2 seconds and 260℃ for 5±2 seconds
Solderability test	The metalized area must have 90% min. solder coverage	Dip pads in flux (Alpha 100 or equiv.) and dip in solder pot at 230±5℃ for 5 seconds

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Component adhesion (Push test)	20N：2012, 2520, 3225 10N：1608 5N：1005	The device shall be reflow soldered (230±5℃ for 10 seconds) to a tinned copper substrate. A dynometer force gauge shall be applied to the side of the component . The device must withstand the minimum force indicated at left without a failure of the termination to board attachment.
CLIMATIC TEST		
Temperature characteristic	1.There shall be no case deformation or change in appearance. 2.Inductance shall not change more than ±5% 3.Q shall not change more than±10%	-40℃~125℃
Humidity test		Temp.：50±2℃ R.H.：90~95 % Time.：96±2 hours
Low temperature storage		Temp.：-40±2℃ Time.：48±2 hours
Thermal shock test		-40℃ for 30 minutes. +125℃ for 30 minutes. Total：10 cycles
High temperature storage		Temp.：125±2℃ Time.：48±2 hours
Note： Inductors are to be tested after 1 hour at room temperature.		
LIFE TEST		
High tempera - ture load life test	Inductors shall not have a shorted or open winding.	1.Temp：85±2℃ 2.Time：1000±12 hours 3.Load：Allowed DC current
Humidity load life		1.Temp：40±2℃ 2.R.H.：90-95% 3.Time：1000±12 hours 4. Load：Allowed DC current

SPECIFICATION FOR APPROVAL

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		ABC'S ITEM NO.	

X . UL CARD：

OBMW2 August 27, 1999

Magnet Wire-Comporent

ELEKTRISOLA (MALAYSLA) SDN BHD E143312
IALAN DAMN SATU IANDA BAIK 28750 BENTONG, PAHANG
DARUL MAKMUR MALAYSIA

Mtl Dsg	Mark Dsg	Coating Type BC	Coating Type OC	ANSI Typ	Temp Class
Estersol 160	E180	Polyesterimide (solderable)	——	MW-77	180
Amldester 200	A200	Polyesterimide	——	MW-74	200
Polysol-N 155	PN155	Polyurechane	Nylon	MW-80, MW-28	155, 100
Polysol 155	P155	Polyurechane	——	MW-79, MW-79	155, 130
Polysol 155g	Pg155	Polyurechane	——	MW-79	130
Polysol 155p	Pp155,Gp155	Polyurechane	——	MW-79	155
Polysol 160	P160	Polyurechane	——	MW-79	155
Polysol 180	P180	Polyurechane	——	MW-79	155
Polysol 170	P170 or G170	Polyurechane	——	MW-79	156
Polysol-N 180	PN180	Polyurechane	Nylon	——	180

Marking：Dompany name/nateriel designation or marked designation and factory identification on package ok reel

See General Information preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.