

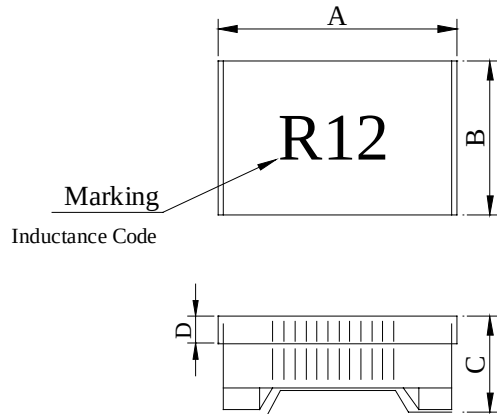
SPECIFICATION FOR APPROVAL

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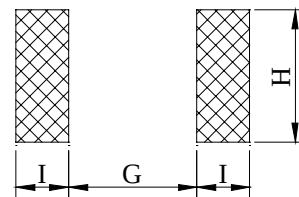
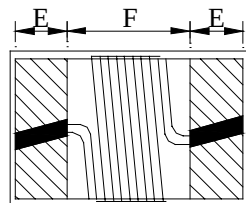
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PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2520□□□□L□
		ABC'S ITEM NO.	

I . CONFIGURATION & DIMENSIONS :

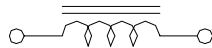


A	: 2.50±0.2	m/m
B	: 2.00±0.2	m/m
C	: 1.60±0.2	m/m
D	: 0.50	m/m
E	: 0.50	m/m
F	: 1.50	m/m
G	: 1.20	m/m
H	: 2.30	m/m
I	: 0.65	m/m



(PCB Pattern)

II . SCHEMATIC DIAGRAM :



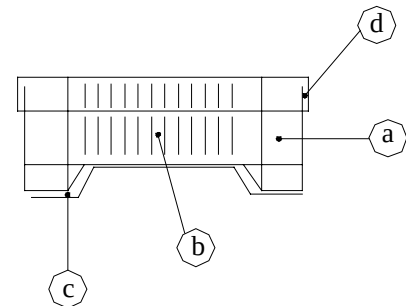
III . MATERIALS :

- 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.

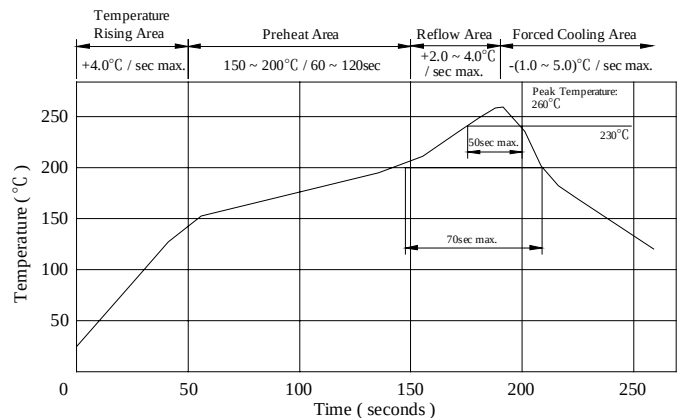
include ceramic

IV . GENERAL SPECIFICATION :

- a . Temp Rise : 15°C max.
- b . Rated current : Current cause inductance drop within 10% max.
- c . Storage temp. : -40°C ----+125°C
- d . Operating temp. : -40°C ----+125°C



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



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V . ELECTRICAL CHARACTERISTICS :

DWG No.	Inductance (nH)	Q min	Test Freq. (MHz)		SRF (MHz) min	RDC (Ω) max	IDC (mA) max
			L	Q			
SW25203N3DL□	3.3±0.3	50	100	1000	6000	0.06	1000
SW25206N8JL□	6.8± 5%	50	100	1000	5500	0.06	1000
SW25208N2JL□	8.2± 5%	50	100	1000	5500	0.06	1000
SW252010NJL□	10.0± 5%	50	100	1000	4300	0.08	1000
SW252012NJL□	12.0± 5%	60	100	500	3600	0.08	1000
SW252015NJL□	15.0± 5%	60	100	500	2700	0.08	1000
SW252018NJL□	18.0± 5%	60	100	350	2700	0.10	1000
SW252022NJL□	22.0± 5%	60	100	350	2500	0.10	1000
SW252027NJL□	27.0± 5%	60	100	350	1800	0.10	1000
SW252033NJL□	33.0± 5%	60	100	350	1700	0.10	1000
SW252039NJL□	39.0± 5%	60	100	350	1500	0.10	1000
SW252047NJL□	47.0± 5%	60	100	350	1500	0.10	1000
SW252056NJL□	56.0± 5%	60	100	350	1350	0.12	1000
SW252068NJL□	68.0± 5%	60	100	350	1300	0.15	1000
SW252082NJL□	82.0± 5%	60	100	350	1100	0.18	1000
SW2520R10JL□	100.0± 5%	60	100	350	1100	0.18	1000
SW2520R12JL□	120.0± 5%	45	25	100	950	0.20	800
SW2520R15JL□	150.0± 5%	45	25	100	880	0.22	800
SW2520R18JL□	180.0± 5%	45	25	100	800	0.33	800
SW2520R22JL□	220.0± 5%	45	25	100	730	0.45	800
SW2520R27JL□	270.0± 5%	45	25	100	650	0.75	600
SW2520R33JL□	330.0± 5%	45	25	100	570	0.90	500
SW2520R39JL□	390.0± 5%	45	25	100	530	1.06	470
SW2520R47JL□	470.0± 5%	45	25	100	480	1.17	420
SW2520R56JL□	560.0± 5%	45	25	100	430	1.50	310
SW2520R68JL□	680.0± 5%	45	25	100	380	2.06	230
SW2520R75JL□	750.0± 5%	45	25	100	360	2.20	200
SW2520R82JL□	820.0± 5%	45	25	100	350	2.30	180
SW2520R91JL□	910.0± 5%	45	25	100	330	3.18	150
SW25201R0JL□	1000.0± 5%	35	25	50	310	3.30	120

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

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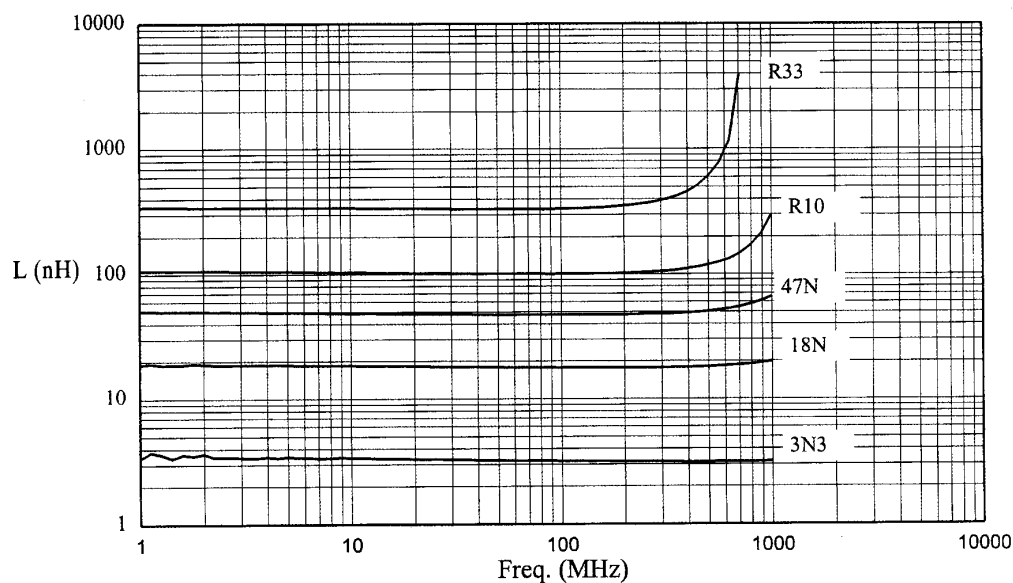
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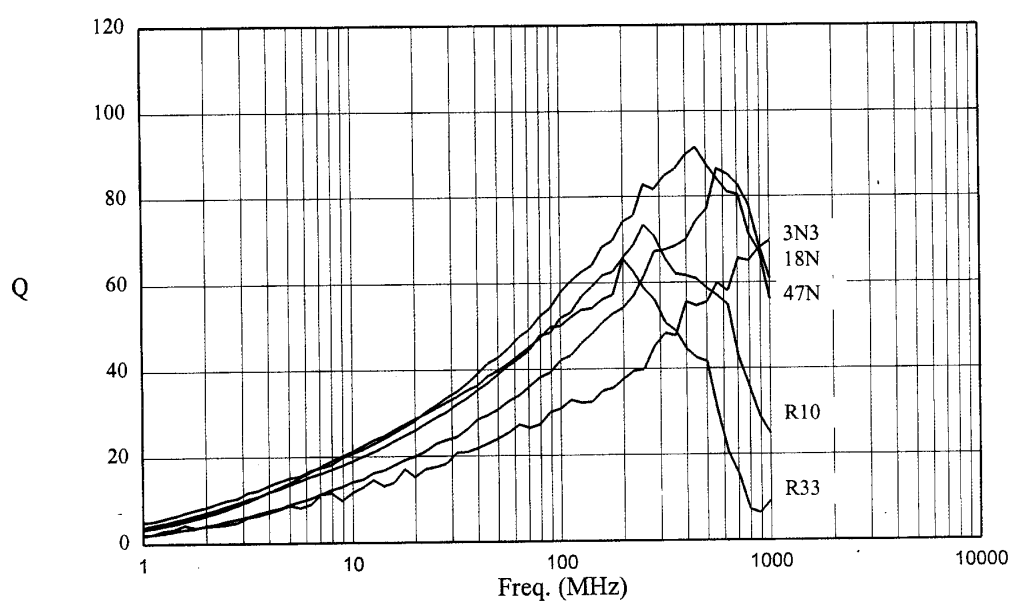
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VI . CURVE :

L vs Freq Plot



Q vs Freq Plot



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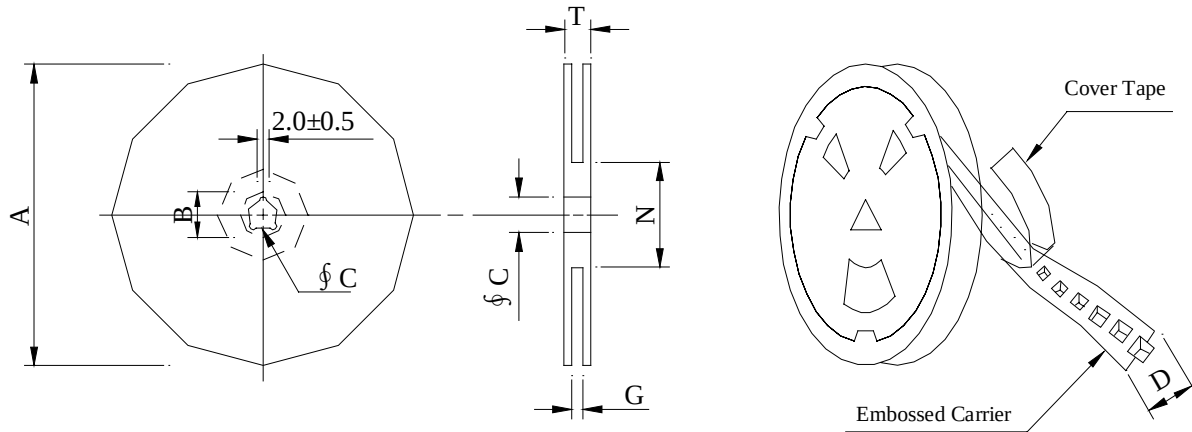
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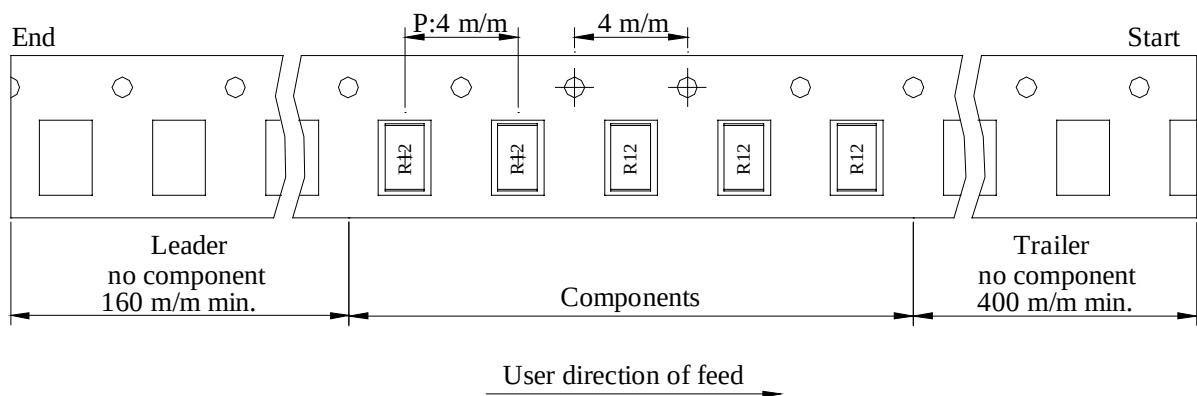
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VII . PACKAGING INFORMATION :

(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

(2) 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)
SW2520	2,000	95	07 - 08	100,000	6.50	41 x 39 x 22

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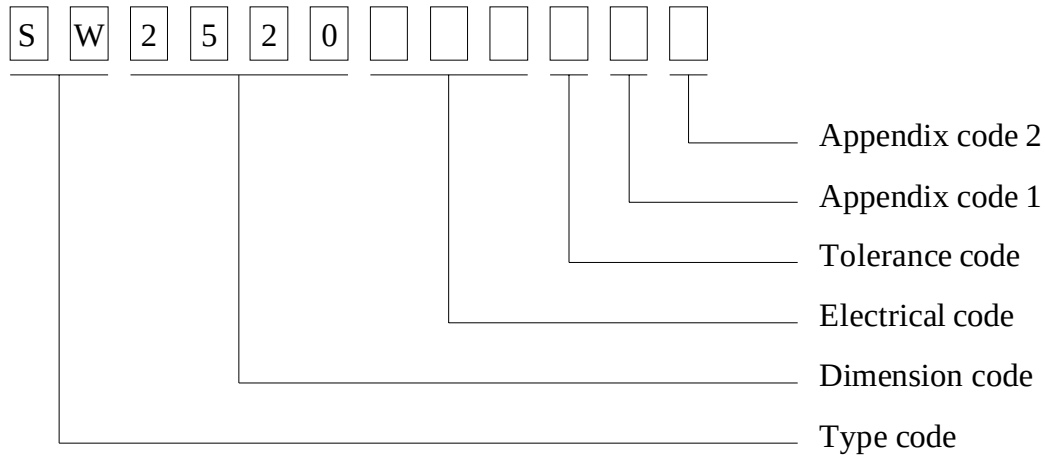
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VIII . DWG EXPRESSION :



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	

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PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO.	SW2520□□□□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 current 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°C	
Temperature rise test	20°C max.	1.Applied the allowed DC current for 10 minutes. 2.Temperature measure by digital 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.	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)	2.Inductance shall not change more than ±5%	Inductors shall be dropped 10 times from a height of 1m onto 3cm wooden board .	
Resistance to soldering heat	3.Q shall not change more than±10%	Inductors shall be reflowed onto a P.C. board using solder paste. Solder process shall be 230°C for 20±2 seconds and 260°C 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°C for 5 seconds	

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PROD. NAME	WOUND CHIP INDUCTOR	ABC'S DWG NO. ABC'S ITEM NO.	SW2520□□□□L□
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Component adhesion (Push test)	20N : 2012, 2520, 3225 10N : 1608 5N : 1005	The device shall be reflow soldered (230±5°C for 10 seconds) to a tinned copper substrate. A dynamometer 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.
<i>CLIMATIC TEST</i>		
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°C~125°C
Humidity test		Temp. : 50±2°C R.H. : 90~95 % Time. : 96±2 hours
Low temperature storage		Temp. : -40±2°C Time. : 48±2 hours
Thermal shock test		-40°C for 30 minutes. +125°C for 30 minutes. Total : 10 cycles
High temperature storage		Temp. : 125±2°C Time. : 48±2 hours
Note : Inductors are to be tested after 1 hour at room temperature.		
<i>LIFE TEST</i>		
High temperature load life test	Inductors shall not have a shorted or open winding.	1.Temp : 85±2°C 2.Time : 1000±12 hours 3.Load : Allowed DC current
Humidity load life		1.Temp : 40±2°C 2.R.H. : 90-95% 3.Time : 1000±12 hours 4. Load : Allowed DC current

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X . UL CARD :

OBMW2

August 27, 1999

Magnet Wire-Component

ELEKTRISOLA (MALAYSLA) SDN BHD

E143312

IALAN DAMN SATU IANDA BAIK 28750 BENTONG, PAHANG
DARUL MAKMUR MALAYSIA

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

Marking : Company name/material 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.

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