

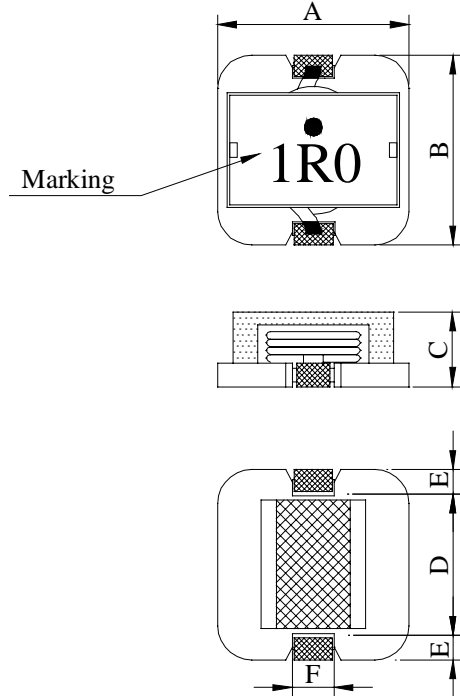
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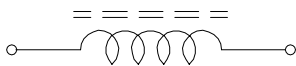
PROD. NAME	SHIELDED SMD POWER INDUCTOR	ABC'S DWG No. ABC'S ITEM No.	SP2480□□□□L□
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I . MECHANICAL DIMENSIONS :



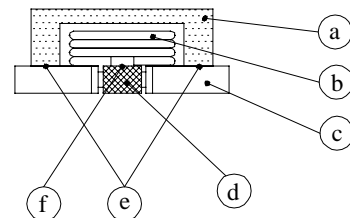
A :	22.5±0.5	m/m
B :	24.0±0.5	m/m
C :	8.7 max.	m/m
D :	17.6 typ.	m/m
E :	3.3 typ.	m/m
F :	5.0 typ.	m/m
G :	7.0 typ.	m/m
H :	15.8 typ.	m/m
I :	5.0 typ.	m/m

II . SCHEMATIC DIAGRAM :

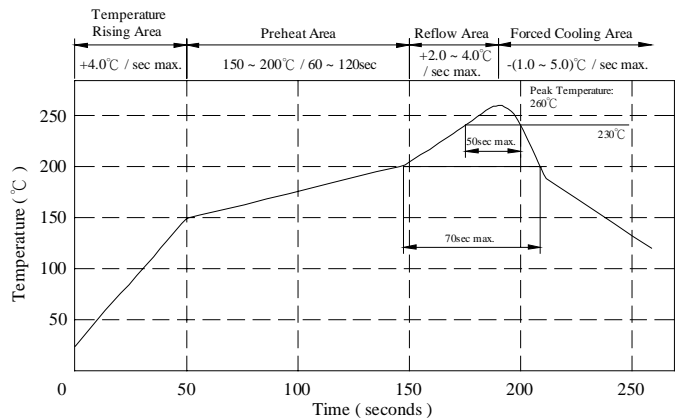


III . MATERIALS LIST :

- a . Core : Ferrite core
- b . Wire : Ultra-Fine rectangular
Enamelled copper wire
- c . Base : UL 94V-0
- d . Terminal : Cu / Ni / Sn
- e . Adhesive : Epoxy resin
- f . Solder wire : Sn / Cu
- g . Tape : Kapton class H
- h . Remark : Lead content 200ppm max.
include ferrite



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



IV . 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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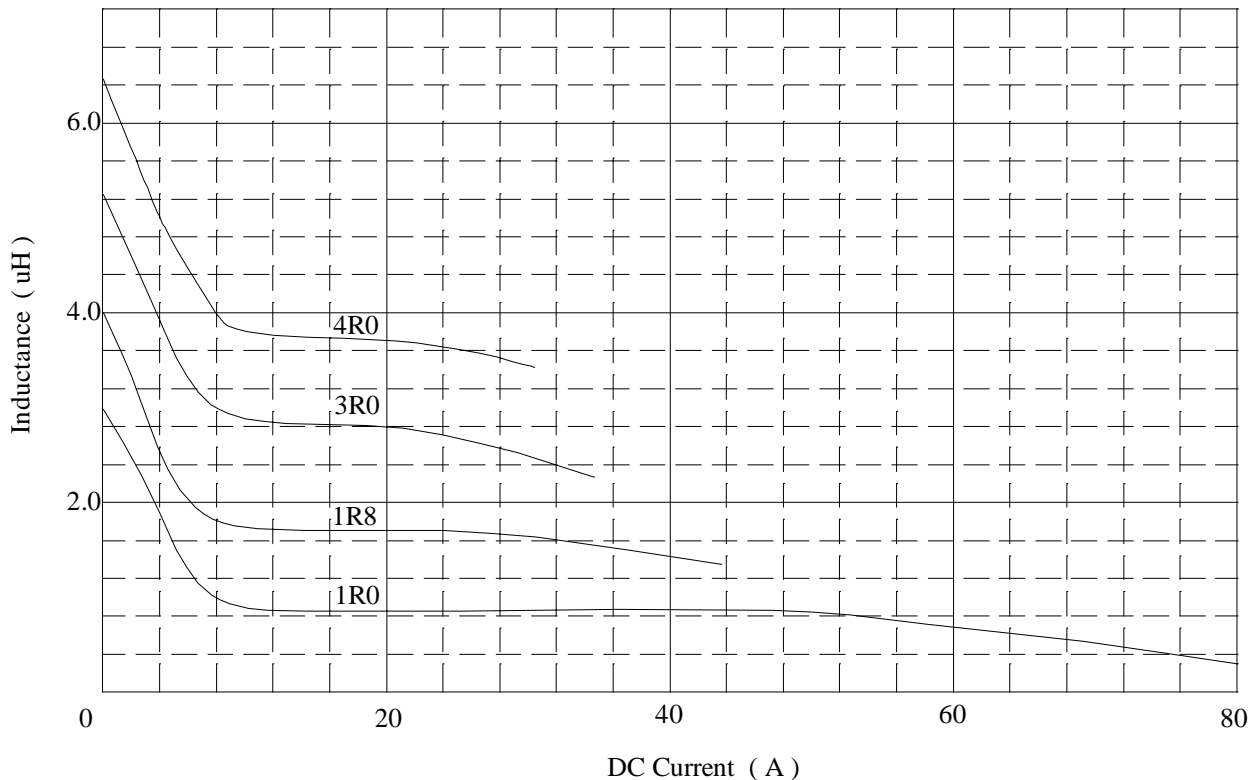
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		ABC'S ITEM No.	

V . ELECTRICAL CHARACTERISTICS :

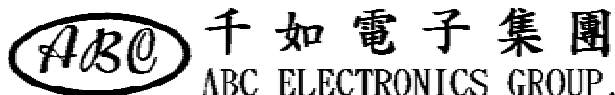
DWG No.	Initial Inductance L0 (uH)	Inductance at flat point L1 (uH)	Flat point ref. (A)	IDC (A)	DC Resistance (mΩ)	
					max.	typ.
SP24801R0YL□	3.0± 25%	1.0± 25%	8	50	1.0	0.70
SP24801R8YL□	4.0± 25%	1.8± 25%	8	40	1.6	1.16
SP24803R0YL□	5.3± 25%	3.0± 25%	8	32	2.8	2.17
SP24804R0YL□	6.5± 25%	4.0± 25%	8	28	3.4	2.63

- 1). □ : Packaging information ... A Bulk B Taping Reel
- 2). Measured Frequency of inductance is 100 KHz / 1V
- 3). IDC : Temp . rise 40°C max. & $\Delta L/L0A$ 25% typ.

@ Inductance VS. DC Superposition characteristics



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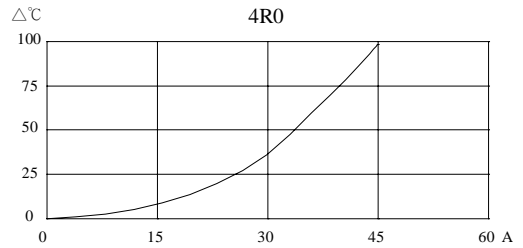
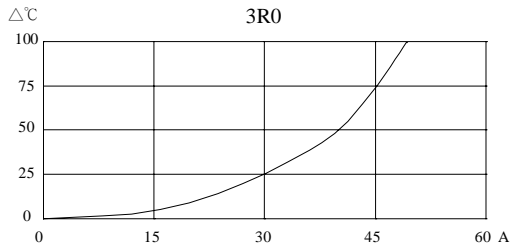
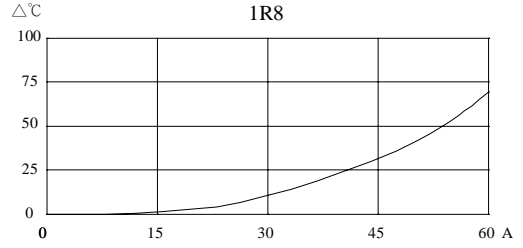
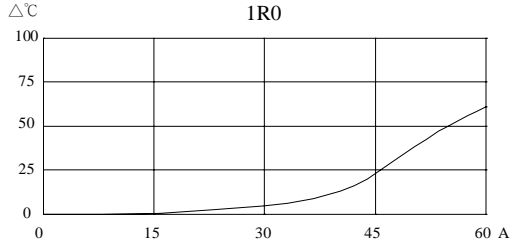
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@ DC Current VS Temperature Rise



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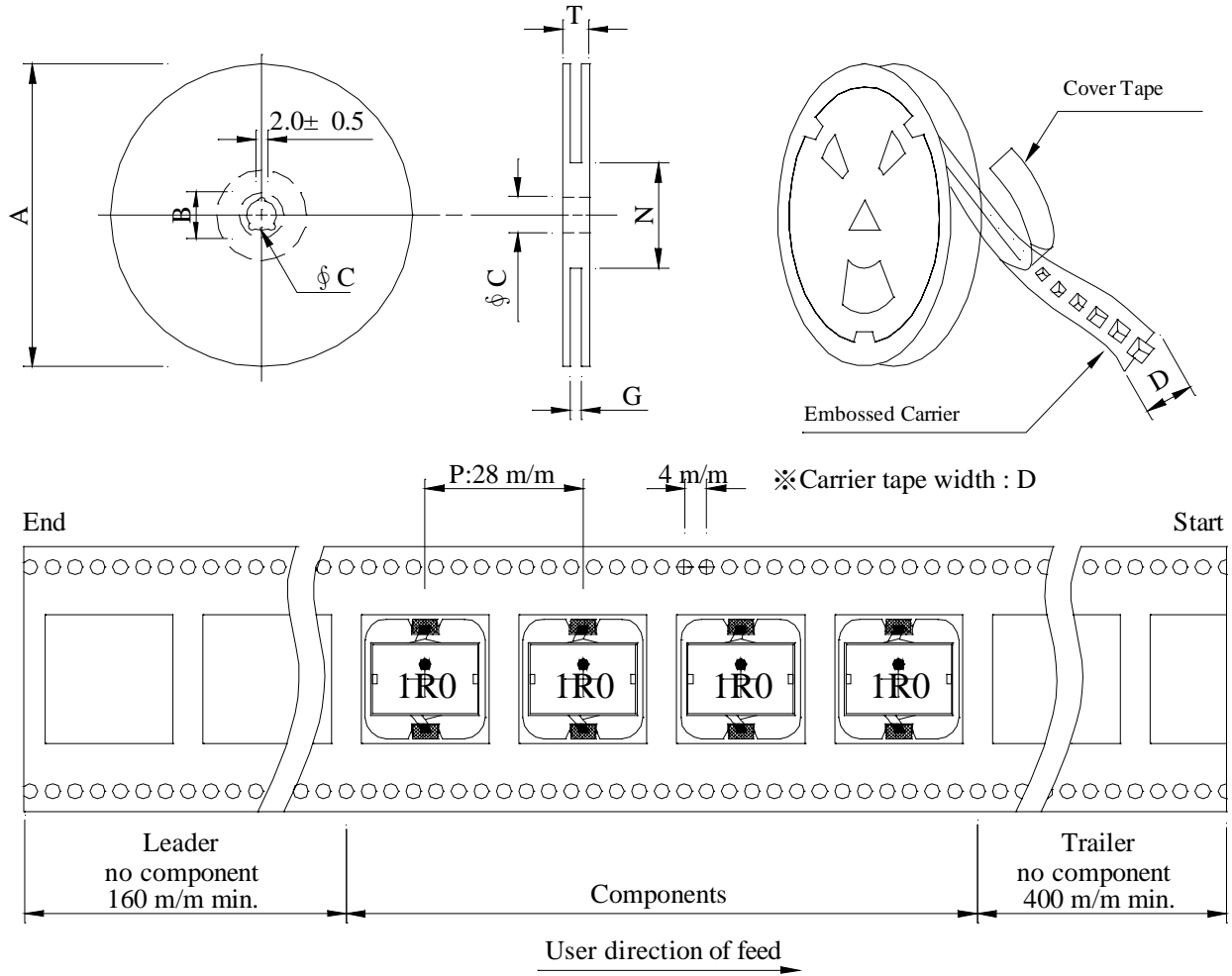
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VI . PACKAGING INFORMATION :

(1) Configuration



(2) Dimensions

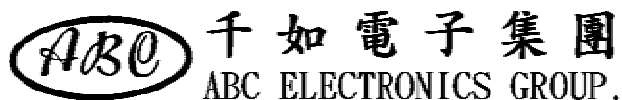
Unit:m/m

Style	A	B	C	D	G	N	T
13 - 44	330	21.0± 0.8	13.0 ^{+0.5} _{-0.2}	44.0± 0.3	44.4 ^{+2.0} ₋₀	100 ⁻⁰	50.4 ⁺⁰

(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)
SP2480	150	2275	13 - 44	600	11.90	395 x 395 x 265

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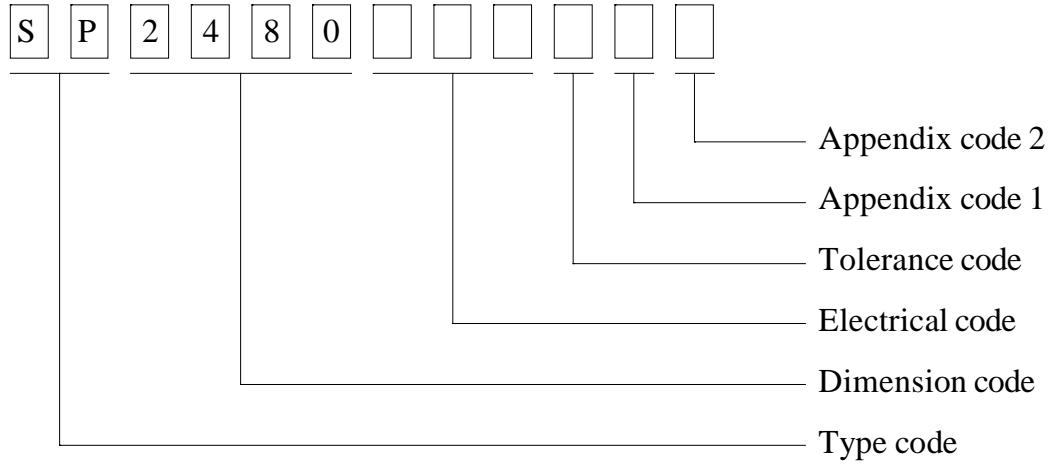
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VII . DWG EXPRESSION :



- 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)	150 pcs	

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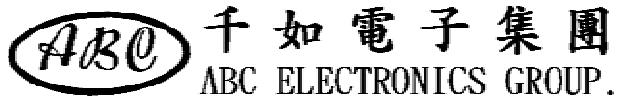
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VIII . RELIABILITY TEST :

Test item	Specification	Test condition								
Solderability	More than 90% of the terminal electrode shall be covered With fresh solder.	Preheat : 150± 25°C for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder temp. : 250± 5°C Flux : Rosin Dip time : 4± 1 seconds								
Thermal shock test (Temp. cycle)	Inductance shall not change more than ± 20%	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">Room temp. —————></td> <td style="border: none; text-align: center;">-25± 2 °C</td> </tr> <tr> <td style="border: none;">15 minutes</td> <td style="border: none; text-align: center;">30 minutes</td> </tr> <tr> <td style="border: none;">Room temp. —————></td> <td style="border: none; text-align: center;">85± 2 °C</td> </tr> <tr> <td style="border: none;">15 minutes</td> <td style="border: none; text-align: center;">30 minutes</td> </tr> </table> <p>Total : 50 cycles</p>	Room temp. —————>	-25± 2 °C	15 minutes	30 minutes	Room temp. —————>	85± 2 °C	15 minutes	30 minutes
Room temp. —————>	-25± 2 °C									
15 minutes	30 minutes									
Room temp. —————>	85± 2 °C									
15 minutes	30 minutes									
Humidity Resistance test		Temperature : 40± 2°C Humidity : 90 ~ 95% Applied current : Per spec. Time : 500 hours								
High temp. Resistance test		Temperature : 85± 2°C Applied current : Per spec. Time : 500 hours								

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IX . UL CARD :

OBMW2		July 30, 2001				
Magnet Wire-Component						
UNIMAC LTD		E218212				
Mtl Dsg	Mark Dsg	Coat Typ	ANSI Type	Temp Class		
AIW	—	BC Polyamide-imide	—	220		
FT-AIWU	—	Polyamide-imide	—	220		
SFT-AIWU	—	Polyamide-imide	—	220		
<p># - May be followed by LZ to denote Litz wire. Marking : Company name, material designation or marked designation on package or reel, and Recognized Component Mark.</p>						
8/27/2001		Underwriters Laboratories Inc.		Card 1 of 3 / Card 2 of 3		

QMFZ2		August 31, 2002									
Plastics-Component											
NIPPON PETROCHEMICALS CO LTD		E91944									
Mterial Dsg	Color	Min Thk mm	Flame Class	H W I	H A I	Elec	RTI Mech Imp	Slr	H V R	D 4 9 5	C T I
Liquid Crystal Polyester (LCP), glass filled, furnished as pellets.											
HM-402	NC , BK	0.30	V-0	—	—	130	130	130	—	—	—
<p>(a)-Virgin and Regrind up to 50% have the same basic characteristics. r1-Virgin and Regrind from 1 to 50% by weight incl. have the same Flame characteristics, Tensile Impact, Tensile Strength and Heat Deflection in natural color only. r2-Virgin and Regrind from 26-50% by weight inclusive for the colors NC, and BK liave the same Flame, and Tensile Impact characteristics. r3-Virgin and Regrind from 26-50% by weight inclusive have the same Flame and Tensile Impact characteristics.</p>											
Marking : Company name or trademark 新日本石油化學株式會社 and material designation on container, wrapper or finished part.											
10/15/2002		Underwriters Laboratories Inc.					Card 8 of 9				

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