

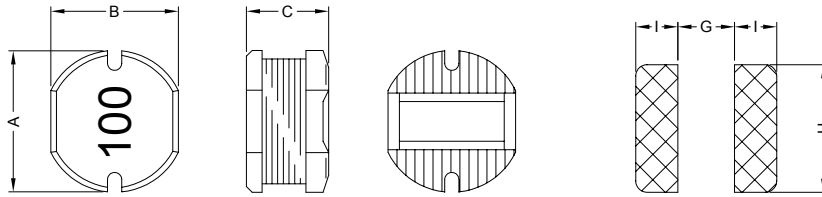
### 1. PART NO. EXPRESSION :

PDC1004100MZ F

(a) (b) (c) (d)(e)(f)

- (a) Series code
- (b) Dimension code
- (c) Inductance code : 100 = 10uH
- (d) Tolerance code : K = ±10%, M = ±20%
- (e) X, Y, Z : Standard part
- (f) F : Lead Free

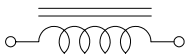
### 2. CONFIGURATION & DIMENSIONS :



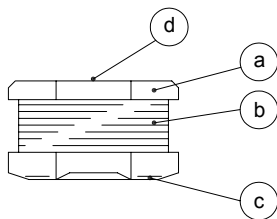
PCB Pattern

A	B	C	G	H	I
10.0±0.3	9.0±0.3	4.0±0.5	2.50 Ref.	9.50 Ref.	3.75 Ref.

### 3. SCHEMATIC :



### 4. MATERIALS :



- (a) Core : DRT Ferrite Core
- (b) Wire : Enamelled Copper Wire
- (c) Terminal : Ag+Cu+Ni+Sn
- (d) Ink : Bon Margue

### 5. GENERAL SPECIFICATION :

- a) Temp. rise : 40°C Max.
- b) Rated current : Base on temp. rise & ΔL/L0A = 10% Max.
- c) Storage temp. : -40°C to +125°C
- d) Operating temp. : -40°C to +85°C
- e) Resistance to solder heat : 260°C.10 secs



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NOTE : Specifications subject to change without notice. Please check our website for latest information.

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## 6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance ( $\mu$ H)	Test Frequency (Hz)	RDC ( $\Omega$ ) Max.	IDC (A) Max.
PDC1004100MZF	10 $\pm$ 20%	2.52M	0.053	2.38
PDC1004120MZF	12 $\pm$ 20%	2.52M	0.061	2.13
PDC1004150MZF	15 $\pm$ 20%	2.52M	0.070	1.87
PDC1004180MZF	18 $\pm$ 20%	2.52M	0.081	1.73
PDC1004220MZF	22 $\pm$ 20%	2.52M	0.088	1.60
PDC1004270MZF	27 $\pm$ 20%	2.52M	0.100	1.44
PDC1004330MZF	33 $\pm$ 20%	2.52M	0.120	1.26
PDC1004390MZF	39 $\pm$ 20%	2.52M	0.151	1.20
PDC1004470KZF	47 $\pm$ 10%	2.52M	0.170	1.10
PDC1004560KZF	56 $\pm$ 10%	2.52M	0.199	1.01
PDC1004680KZF	68 $\pm$ 10%	2.52M	0.223	0.91
PDC1004820KZF	82 $\pm$ 10%	2.52M	0.252	0.85
PDC1004101KZF	100 $\pm$ 10%	1V / 1K	0.344	0.74
PDC1004121KZF	120 $\pm$ 10%	1V / 1K	0.396	0.69
PDC1004151KZF	150 $\pm$ 10%	1V / 1K	0.544	0.61
PDC1004181KZF	180 $\pm$ 10%	1V / 1K	0.621	0.56
PDC1004221KZF	220 $\pm$ 10%	1V / 1K	0.721	0.53
PDC1004271KZF	270 $\pm$ 10%	1V / 1K	0.949	0.45
PDC1004331KZF	330 $\pm$ 10%	1V / 1K	1.100	0.42
PDC1004391KZF	390 $\pm$ 10%	1V / 1K	1.245	0.38
PDC1004471KZF	470 $\pm$ 10%	1V / 1K	1.526	0.35
PDC1004561KZF	560 $\pm$ 10%	1V / 1K	1.904	0.32



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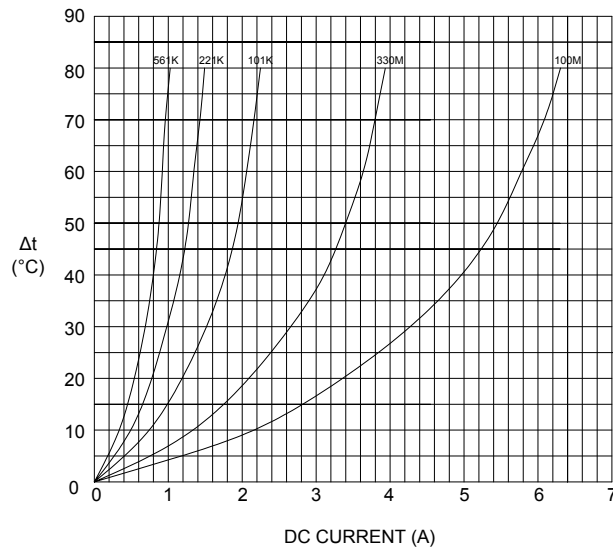
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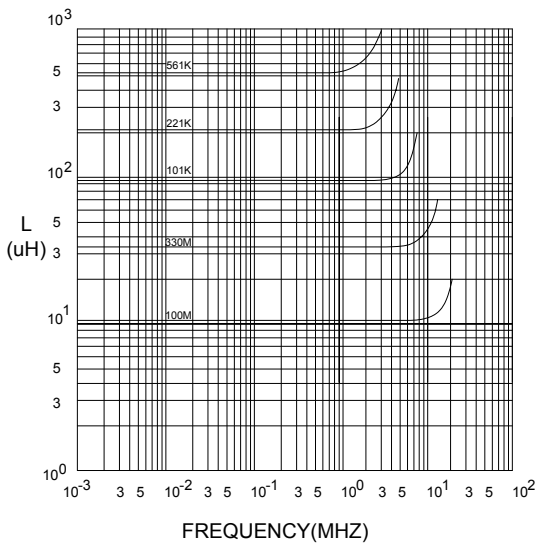
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## 7. CHARACTERISTICS CURVES :

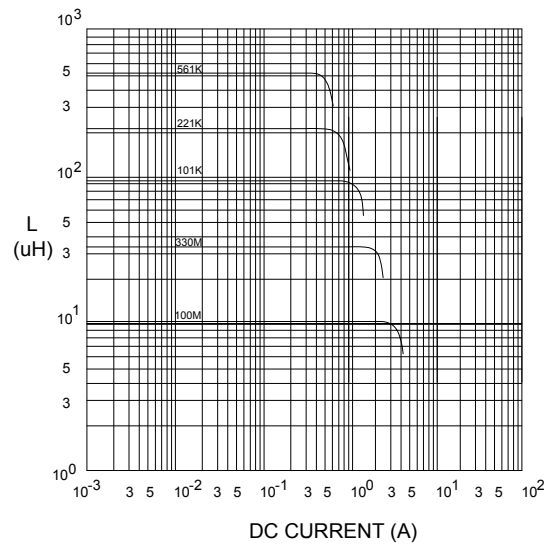
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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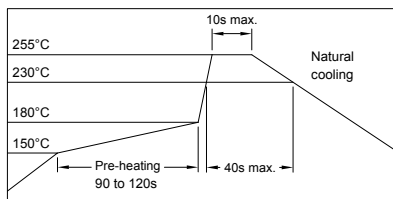
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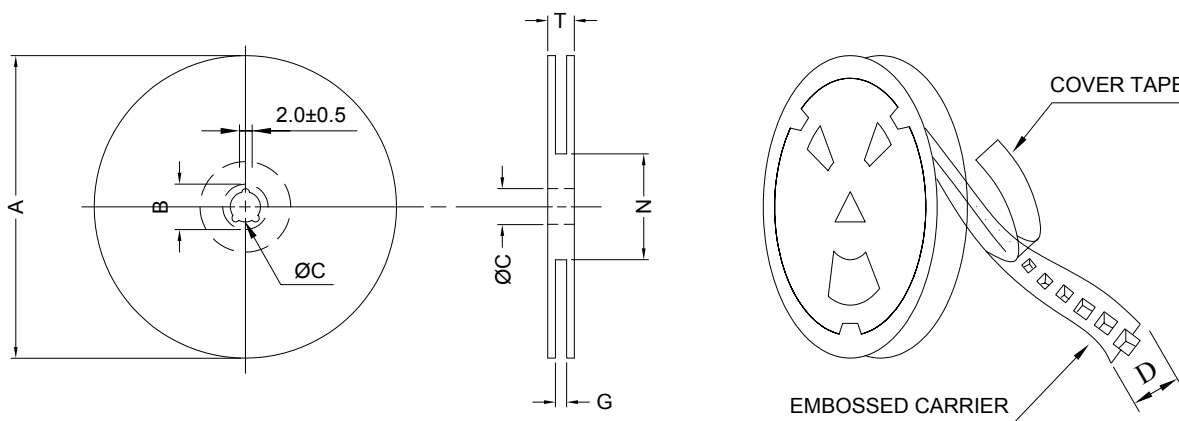
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### RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

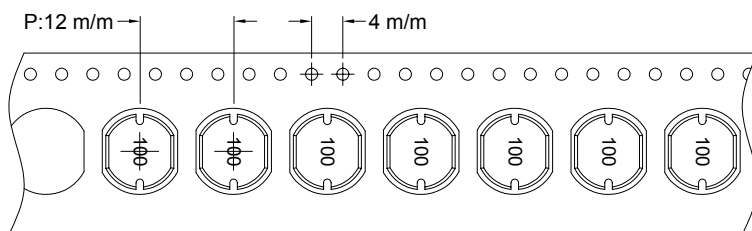


### 8. PACKAGING INFORMATION :

#### ( 1 ) CONFIGURATION



\* CARRIER TAPE WIDTH : D



#### ( 2 ) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
13-24	330	21±0.8	13±0.5	24	26 <sup>+0</sup>	50 <sup>-0</sup>	30.4

#### ( 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)
PDC1004	500	1125	13 - 24	2000	8.0	40 x 40 x 24
PDC1004	800	1800	13 - 24	3200	10.7	40 x 40 x 24



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## 9. RELIABILITY AND TEST CONDITION :

TEST ITEM	SPECIFICATION	TEST CONDITION												
SOLDERABILITY	MORE THAN 90% OF THE TERMINAL ELECTRODE SHALL BE COVERED WITH FRESH SOLDER.	PREHEAT : 125±25°C FOR 60 SECONDS SOLDER : 99%Sn/0.3%Ag/0.7%Cu OR EQUIVALENT SOLDER TEMP. : 245±5°C FLUX : ROSIN DIP TIME : 4±1 SECONDS												
THERMAL SHOCK TEST  ( TEMP. CYCLE )	INDUCTANCE SHALL NOT CHANGE MORE THAN ±20%	<table border="0"> <tr> <td>ROOM TEMP.</td> <td>→</td> <td>-25±2°C</td> </tr> <tr> <td>15 MINUTES</td> <td></td> <td>30 MINUTES</td> </tr> <tr> <td>ROOM TEMP.</td> <td>→</td> <td>85±2°C</td> </tr> <tr> <td>15 MINUTES</td> <td></td> <td>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												

## 10. UL CARD :

<b>OBMW2</b>		<b>November 30, 2000</b>	
<b>Magnet Wire - Component</b>			
<b>PACIFIC ELECTRIC WIRE &amp; CABLE (SHENZHEN) CO LTD</b>			<b>E201757</b>
607 BAOLONG INDUSTRIAL ESTATE LONGGANG, SHENZHEN			
GUANGDONG CHINA			
Mtl Dsg	Coating Type	TC	ANSI Type
UEW/U	BC Polyurethane	—	— 130
PEW/U	Polyester	—	MW5-C 155°C
PEWH/U	Modified Polyester	—	MW30-C 180
PEW-NY/U	Polyester	Polyamide	MW24-C 155
HAI/U	Polyester(Amide)(Imide)	Polyamideimide	MW35,73 200
UEW-NY/U	Polyurethane	Polyamide	MW80-C 155
			MW28-C 130
<b>Marking: Company name and material designation or marked designation on package or reel, and Recognized Component Mark.</b>			
<b>See General Information Preceding These Recognitions</b>			
1/3/2001	Underwriters Laboratories Inc.	Card 1 of 2	



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