

### 1. PART NO. EXPRESSION :

PDC03021R0MZ F

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

(a) Series code

(b) Dimension code

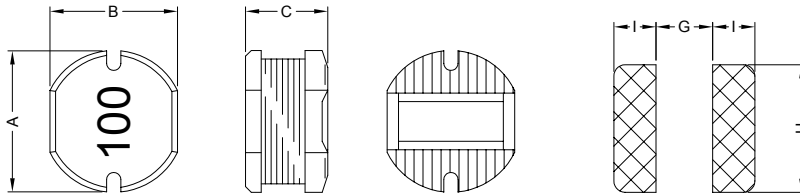
(c) Inductance code : 1R0 = 1.0uH

(d) Tolerance code : M = ±20%

(e) X, Y, Z : Standard part

(f) F : Lead Free

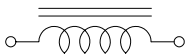
### 2. CONFIGURATION & DIMENSIONS :



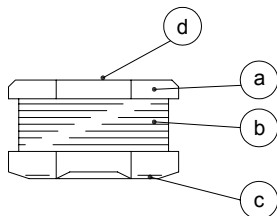
PCB Pattern

A	B	C	G	H	I
3.5±0.3	3.0±0.3	2.2±0.3	0.80 Ref.	3.50 Ref.	1.60 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 &  $\Delta L/L0A = 10\%$  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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## 6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance ( $\mu$ H)	Test Frequency (Hz)	RDC ( $\Omega$ ) Max.	IDC (A) Max.
PDC03021R0MZF	1.0 $\pm$ 20%	1V / 7.96M	0.055	2.50
PDC03021R4MZF	1.4 $\pm$ 20%	1V / 7.96M	0.060	2.00
PDC03021R8MZF	1.8 $\pm$ 20%	1V / 7.96M	0.070	1.90
PDC03022R2MZF	2.2 $\pm$ 20%	1V / 7.96M	0.090	1.70
PDC03022R7MZF	2.7 $\pm$ 20%	1V / 7.96M	0.100	1.60
PDC03023R3MZF	3.3 $\pm$ 20%	1V / 7.96M	0.130	1.30
PDC03023R9MZF	3.9 $\pm$ 20%	1V / 7.96M	0.150	1.20
PDC03024R7MZF	4.7 $\pm$ 20%	1V / 7.96M	0.180	1.10
PDC03025R6MZF	5.6 $\pm$ 20%	1V / 7.96M	0.210	1.00
PDC03026R8MZF	6.8 $\pm$ 20%	1V / 7.96M	0.230	0.95
PDC03028R2MZF	8.2 $\pm$ 20%	1V / 7.96M	0.310	0.90
PDC0302100MZF	10.0 $\pm$ 20%	1V / 2.52M	0.350	0.80
PDC0302120MZF	12.0 $\pm$ 20%	1V / 2.52M	0.390	0.70
PDC0302150MZF	15.0 $\pm$ 20%	1V / 2.52M	0.540	0.65
PDC0302180MZF	18.0 $\pm$ 20%	1V / 2.52M	0.620	0.60
PDC0302220MZF	22.0 $\pm$ 20%	1V / 2.52M	0.720	0.55
PDC0302270MZF	27.0 $\pm$ 20%	1V / 2.52M	0.820	0.50
PDC0302330MZF	33.0 $\pm$ 20%	1V / 2.52M	1.100	0.45
PDC0302390MZF	39.0 $\pm$ 20%	1V / 2.52M	1.200	0.40
PDC0302470MZF	47.0 $\pm$ 20%	1V / 2.52M	1.600	0.38



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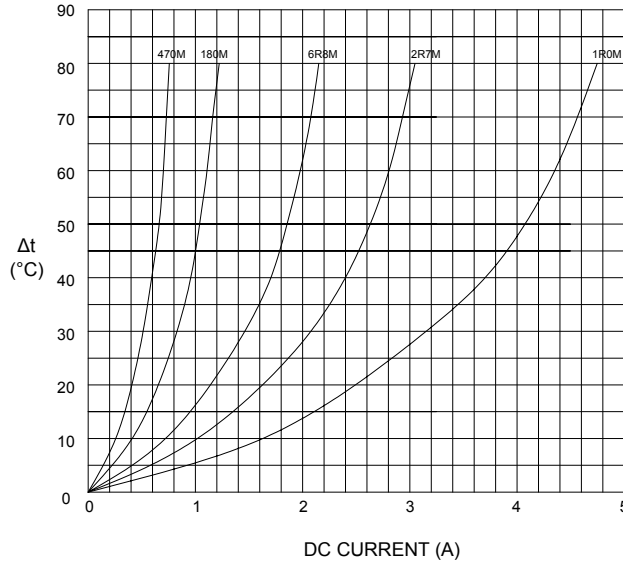
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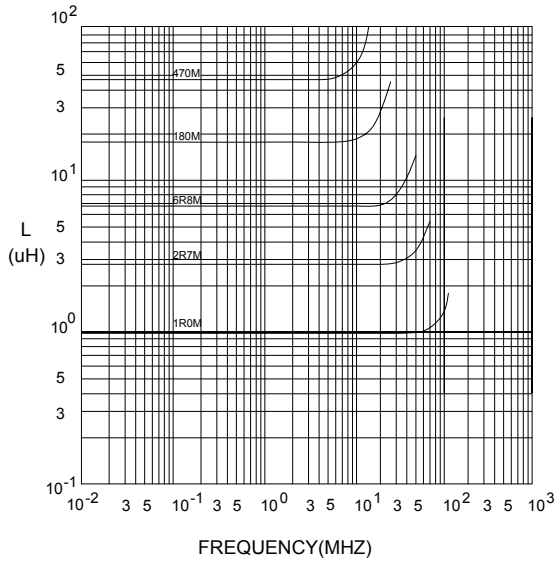
## 7. CHARACTERISTICS CURVES :

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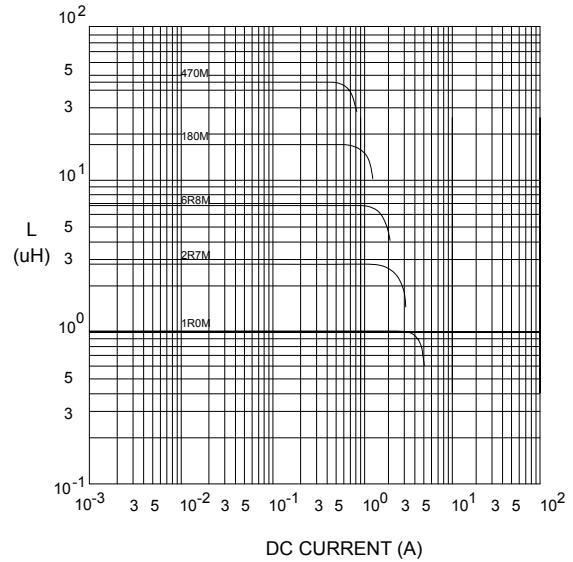
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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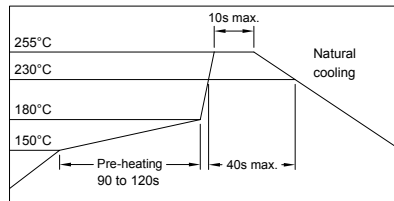
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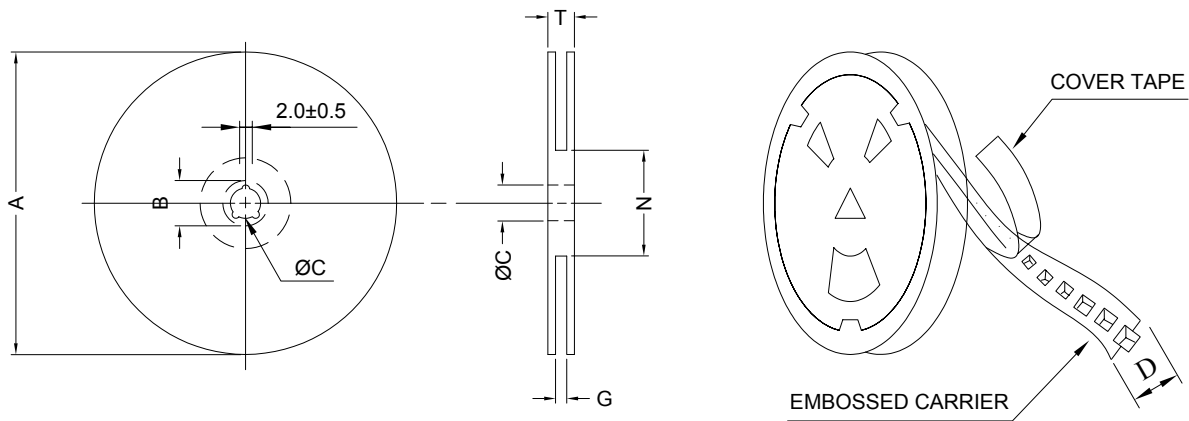
### RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS



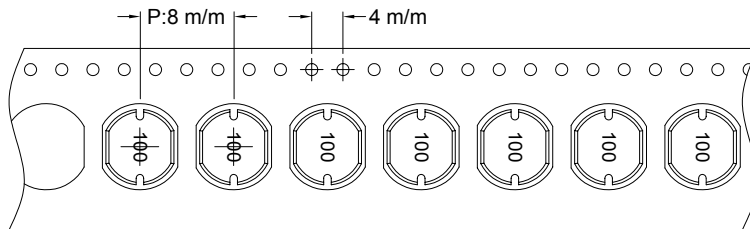
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### 8. PACKAGING INFORMATION :

#### ( 1 ) CONFIGURATION



\* CARRIER TAPE WIDTH : D



#### ( 2 ) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
13 - 12	330	21±0.8	13±0.5	12	14 <sup>+0</sup>	50 <sup>-0</sup>	18.4

#### ( 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)
PDC0302	3,000	780	13 - 12	24,000	9.80	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%	ROOM TEMP. → -25±2°C 15 MINUTES → 30 MINUTES  ROOM TEMP. → 85±2°C 15 MINUTES → 30 MINUTES  TOTAL : 50 CYCLES
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				
	Coating Type		ANSI	
Mtl Dsg	BC	TC	Type	TI
UEW/U	Polyurethane	—	—	130
PEW/U	Polyester	—	MW5-C	155°C
PEWH/U	Modified Polyester	—	MW30-C	180
PEW-NY/U	Polyester	Polyamide	MW24-C	155
HAL/U	Polyester(Amide)(Imide)	Polyamideimide	MW35,73	200
UEW-NY/U	Polyurethane	Polyamide	MW80-C	155
			MW28-C	130
<p>Marking: Company name and material designation or marked designation on package or reel, and Recognized Component Mark.</p> <p>See General Information Preceding These Recognitions</p>				
1/3/2001	Underwriters Laboratories Inc.		Card 1 of 2	



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