

1. PART NO. EXPRESSION :

PDC05021R0MZ F

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

(a) Series code

(b) Dimension code

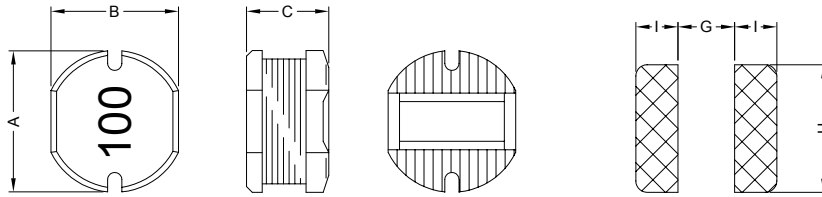
(c) Inductance code : 1R0 = 1.0uH

(d) Tolerance code : M = ±20%

(e) X, Y, Z : Standard part

(f) F : Lead Free

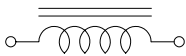
2. CONFIGURATION & DIMENSIONS :



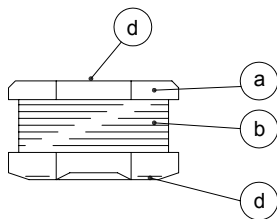
PCB Pattern

A	B	C	G	H	I
5.8±0.3	5.2±0.3	2.50±0.35	1.70 Ref.	5.50 Ref.	2.15 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 (μ H)	Test Frequency (Hz)	RDC (Ω) Max.	IDC (A) Max.
PDC05021R0MZF	1.0 \pm 20%	7.96M	0.030	4.80
PDC05021R4MZF	1.4 \pm 20%	7.96M	0.035	4.20
PDC05021R8MZF	1.8 \pm 20%	7.96M	0.040	3.80
PDC05022R2MZF	2.2 \pm 20%	7.96M	0.050	3.50
PDC05022R7MZF	2.7 \pm 20%	7.96M	0.055	3.10
PDC05023R3MZF	3.3 \pm 20%	7.96M	0.070	3.00
PDC05023R9MZF	3.9 \pm 20%	7.96M	0.080	2.80
PDC05024R7MZF	4.7 \pm 20%	7.96M	0.090	2.70
PDC05025R6MZF	5.6 \pm 20%	7.96M	0.110	2.20
PDC05026R8MZF	6.8 \pm 20%	7.96M	0.140	1.90
PDC05028R2MZF	8.2 \pm 20%	7.96M	0.150	1.80
PDC0502100MZF	10.0 \pm 20%	2.52M	0.165	1.50
PDC0502120MZF	12.0 \pm 20%	2.52M	0.250	1.40
PDC0502150MZF	15.0 \pm 20%	2.52M	0.280	1.20
PDC0502180MZF	18.0 \pm 20%	2.52M	0.320	1.10
PDC0502220MZF	22.0 \pm 20%	2.52M	0.420	1.00
PDC0502270MZF	27.0 \pm 20%	2.52M	0.450	0.90
PDC0502330MZF	33.0 \pm 20%	2.52M	0.550	0.80
PDC0502390MZF	39.0 \pm 20%	2.52M	0.580	0.75
PDC0502470MZF	47.0 \pm 20%	2.52M	0.830	0.70
PDC0502560MZF	56.0 \pm 20%	2.52M	0.900	0.65
PDC0502680MZF	68.0 \pm 20%	2.52M	0.970	0.60
PDC0502820MZF	82.0 \pm 20%	2.52M	1.200	0.55
PDC0502101MZF	100.0 \pm 20%	1V / 1K	1.500	0.50
PDC0502121MZF	120.0 \pm 20%	1V / 1K	1.700	0.47
PDC0502151MZF	150.0 \pm 20%	1V / 1K	1.950	0.45
PDC0502181MZF	180.0 \pm 20%	1V / 1K	2.600	0.40
PDC0502221MZF	220.0 \pm 20%	1V / 1K	3.400	0.35
PDC0502271MZF	270.0 \pm 20%	1V / 1K	4.000	0.30
PDC0502331MZF	330.0 \pm 20%	1V / 1K	4.500	0.27
PDC0502391MZF	390.0 \pm 20%	1V / 1K	5.000	0.25
PDC0502471MZF	470.0 \pm 20%	1V / 1K	7.000	0.23
PDC0502561MZF	560.0 \pm 20%	1V / 1K	8.000	0.21

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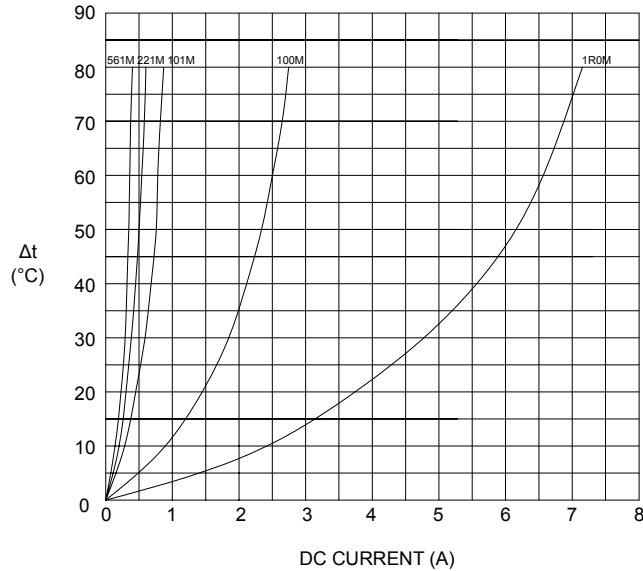
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PG. 2

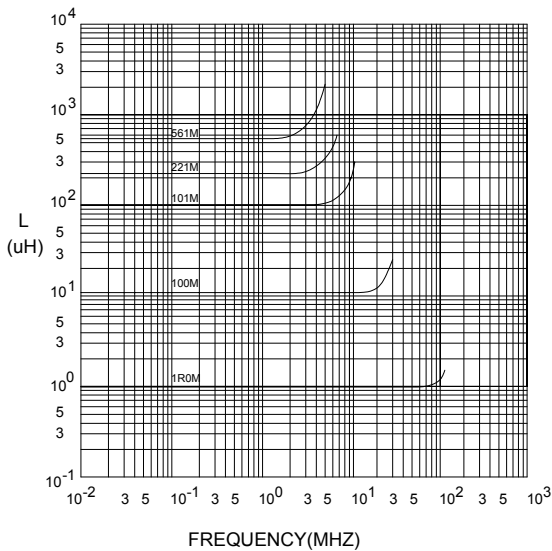
7. CHARACTERISTICS CURVES :

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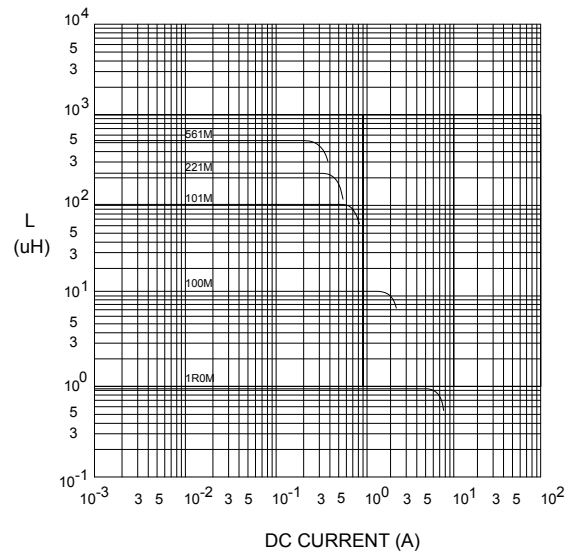
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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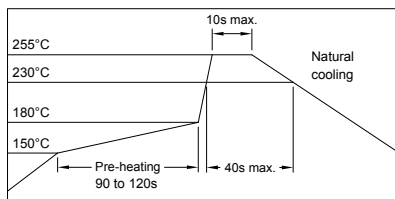
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PG. 3

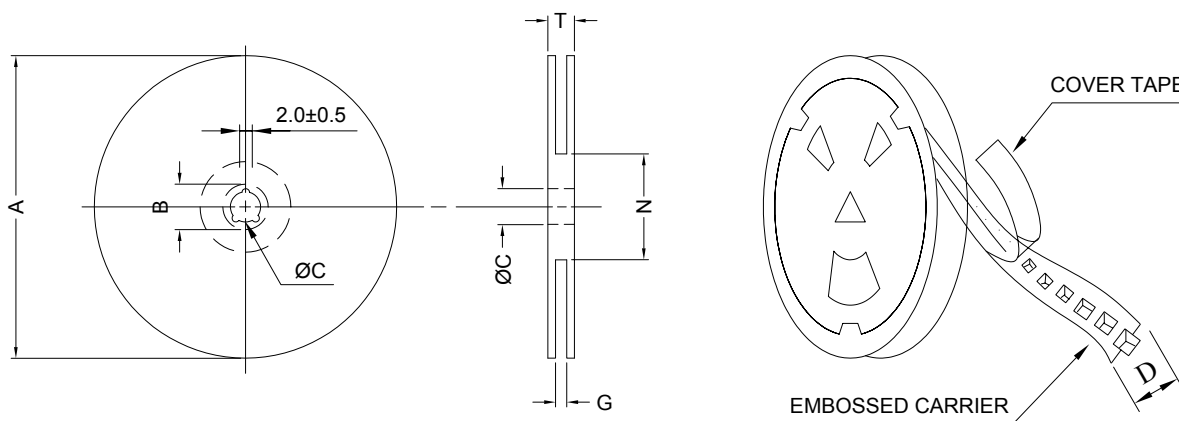
RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS



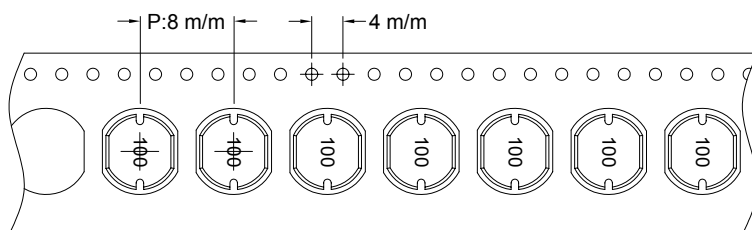
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8. PACKAGING INFORMATION :

(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 ⁺⁰	50 ⁻⁰	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)
PDC0502	2000	1000	13 - 12	16000	11.5	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 :

OBMW2		November 30, 2000		
Magnet Wire - Component				
PACIFIC ELECTRIC WIRE & CABLE (SHENZHEN) CO LTD				E201757
607 BAOLONG INDUSTRIAL ESTATE LONGGANG, SHENZHEN GUANGDONG CHINA				
	Coating Type		ANSI	TI
Mtl Dsg	BC	TC	Type	
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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