1. Part No. Expression:

PDC 1005 100 MZF

- (a)
- (b)
- (c) (d)(e)(f)
- (a) Series Code

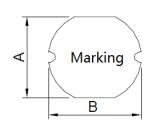
(d) Tolerance Code

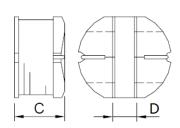
(b) Dimension Code

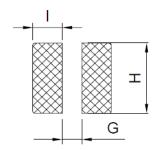
(e) X, Y, Z: Standard Part

- (c) Inductance Code
- (f) RoHS Compliant

2. Configuration & Dimensions:







Recommended PC Board Pattern

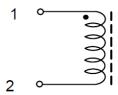
Note:

1. Marking: Inductance code (refer table on next page)

Unit: mm

Α	В	С	D	G	Н	_
9.0±0.4	10.0±0.4	5.4±0.4	3.0±0.3	2.50 Ref.	9.50 Ref.	3.75 Ref.

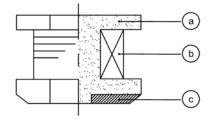
3. Schematic



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



4. Material List



- a) Drum Core
- b) Wire
- c) Electrode

5. General Specification

a) Operating Temperature: - 40°C to +125°C

b) Storage Temperature: - 40°C to +125°C

c) Humidity Range: 90 - 95% RH

d) Heat Rated Current (Irms) will cause the coil temperature rise Δt of 40°C Max.

e) Storage Condition (component in its packaging)

i) Temperature: Less than 60°C

ii) Humidity: ≤ 90%

6. Electrical Characteristics

Part Number	Inductance (uH)	Test Frequency (Hz)	DCR(mΩ) Max.	IDC(mA) Drop%	Part Marking
PDC1005100MZF	10	1V/2.52M	60	2600	100
PDC1005120MZF	12	1V/2.52M	70	2450	120
PDC1005150MZF	15	1V/2.52M	80	2270	150
PDC1005180MZF	18	1V/2.52M	90	2150	180
PDC1005220MZF	22	1V/2.52M	100	1950	220
PDC1005270MZF	27	1V/2.52M	110	1760	270
PDC1005330MZF	33	1V/2.52M	120	1500	330
PDC1005390MZF	39	1V/2.52M	140	1370	390
PDC1005470KZF	47	1V/2.52M	170	1280	470
PDC1005560KZF	56	1V/2.52M	190	1170	560
PDC1005680KZF	68	1V/2.52M	220	1110	680
PDC1005820KZF	82	1V/2.52M	250	1000	820
PDC1005101KZF	100	1V/1K	350	970	101
PDC1005121KZF	120	1V/1K	400	890	121
PDC1005151KZF	150	1V/1K	470	780	151
PDC1005181KZF	180	1V/1K	630	720	181

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



Part Number	Inductance (uH)	Test Frequency (Hz)	DCR(mΩ) Max.	IDC(mA) Drop%	Part Marking
PDC1005221KZF	220	1V/1K	730	660	221
PDC1005271KZF	270	1V/1K	970	570	271
PDC1005331KZF	330	1V/1K	1150	520	331
PDC1005391KZF	390	1V/1K	1300	480	391
PDC1005471KZF	470	1V/1K	1480	420	471
PDC1005561KZF	560	1V/1K	1900	330	561
PDC1005681KZF	680	1V/1K	2250	280	681
PDC1005821KZF	820	1V/1K	2550	240	821

Tolerance: $K = \pm 10\%$; $M = \pm 20\%$

7. Soldering:

Recommended temperature profiles for re-flow soldering in Figure 1.

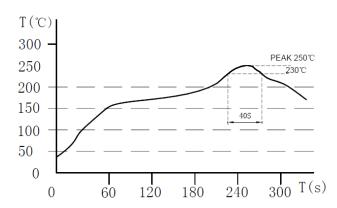
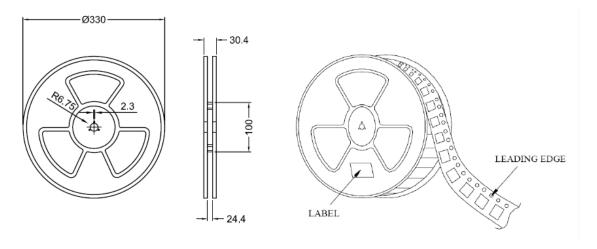


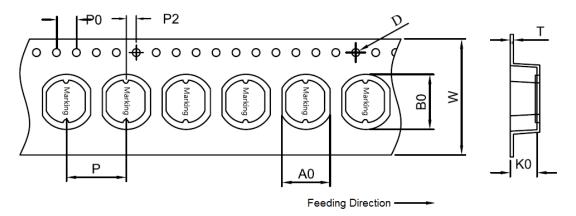
Figure 1: Reflow time: 2 times max

8. Packaging Information:

8-1 Reel Dimension:



8-2 Tape Dimension:



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	P0(mm)	P2(mm)	T(mm)	D(mm)
10.4±0.1	9.4±0.1	6.2±0.1	12.0±0.1	24.0+0.3/-0.1	4.0±0.1	2.0±0.1	0.40	1.5+0.1/-0

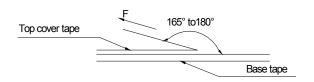
8-3 Packaging Quantity:

PDC	1005
Reel	1000
Carton	5000

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



8-4 Tearing Off Force:



The force for tearing off cover tape is 0.1N to 1.3N in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (kPa)	Tearing Speed mm/min
15~35	25~85	86~106	300

Application Notice:

1. Storage Conditions:

To maintain the solderability of terminal electrodes:

- a) Recommended products should be used within 6 months from the time of delivery.
- b) The packaging material should be kept where no chlorine or sulfur exists in the air.

2. Transportation:

- a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- b) Vacuum pick up is strongly recommended for individual components.
- c) Bulk handling should ensure that abrasion and mechanical shock are minimized.