SMD POWER INDUCTORS

PDH5022 SERIES

1. PART NO. EXPRESSION :

P D H 5 0 2 2 R 7 8 M Z F

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

(a) Series code

(b) Dimension code

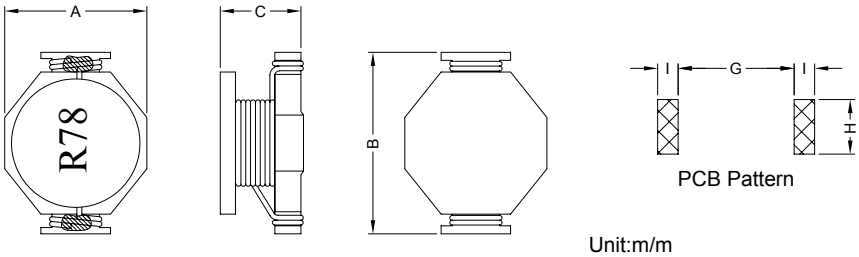
(c) Inductance code : R78 = 0.78uH

(d) Tolerance code : M = ±20%

(e) X, Y, Z : Standard part

(f) F : Lead Free

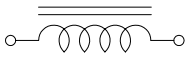
2. CONFIGURATION & DIMENSIONS :



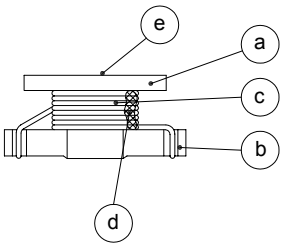
Unit:m/m

A	B	C	G	H	I
16.26 Max.	22.35 Max.	8.00 Max.	14.35 Ref.	8.64 Ref.	3.18 Ref.

3. SCHEMATIC :



4. MATERIALS :



(a) Core : DR Ferrite Core

(b) Base : Phenolic

(c) Wire : Enamelled Copper Wire

(d) Adhesive : Epoxy

(e) Ink : Bon Margue

5. GENERAL SPECIFICATION :

a) Temp. rise : 40°C Typ.

b) Isat : ΔL/L0A = 10% Typ.

c) Operating temp. : -40°C to +85°C

d) Resistance to solder heat : 260°C.10 secs

RoHS Compliant

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

6. ELECTRICAL CHARACTERISTICS :

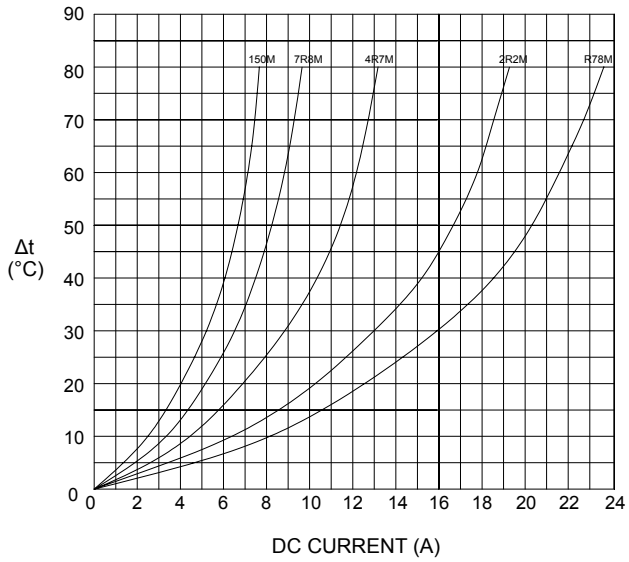
Part No.	Inductance (μH)	Test Freq. (Hz)	SRF (MHz) Typ.	RDC (mΩ) Max.	Isat (A)	Irms (A)
PDH5022R78MZF	0.78±20%	0.1V/100K	156	2.6	30.0	15.0
PDH50221R5MZF	1.50±20%	0.1V/100K	100	4.0	25.0	15.0
PDH50222R2MZF	2.20±20%	0.1V/100K	75	6.1	20.0	12.0
PDH50223R3MZF	3.30±20%	0.1V/100K	60	8.6	17.0	10.0
PDH50223R9MZF	3.90±20%	0.1V/100K	55	10.0	15.0	9.0
PDH50224R7MZF	4.70±20%	0.1V/100K	40	14.0	13.0	8.4
PDH50226R0MZF	6.00±20%	0.1V/100K	35	17.0	12.0	7.5
PDH50227R8MZF	7.80±20%	0.1V/100K	35	18.0	11.0	7.5
PDH5022100MZF	10.00±20%	0.1V/100K	28	26.0	10.0	6.0
PDH5022150MZF	15.00±20%	0.1V/100K	20	32.0	8.0	4.4

RoHS Compliant

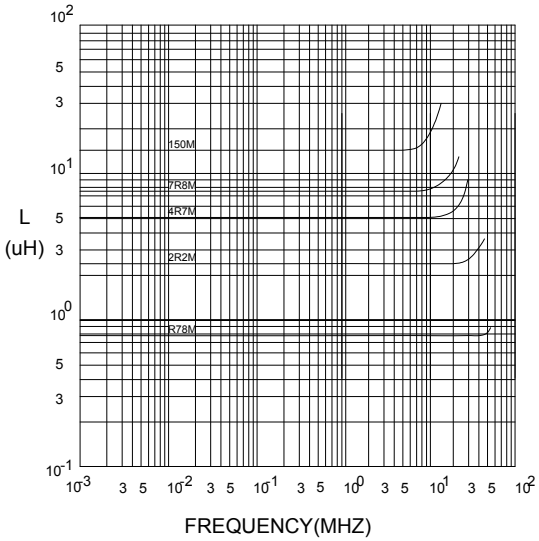
NOTE : Specifications subject to change without notice. Please check our website for latest information.

7. CHARACTERISTICS CURVES :

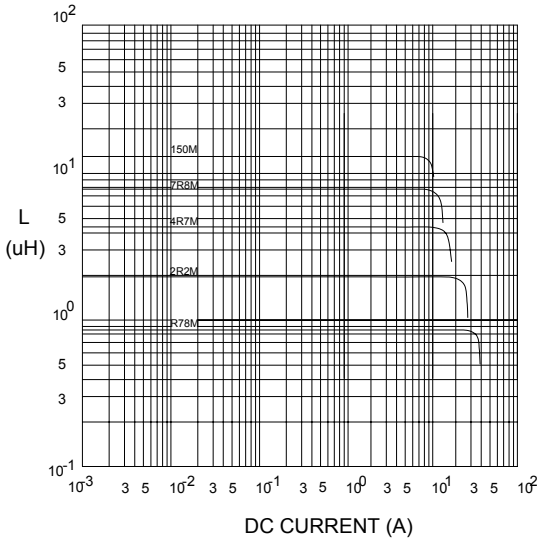
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



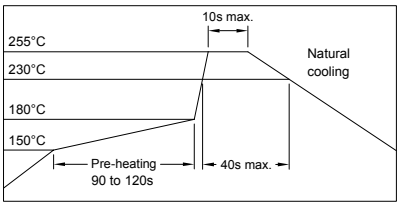
@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



RoHS Compliant

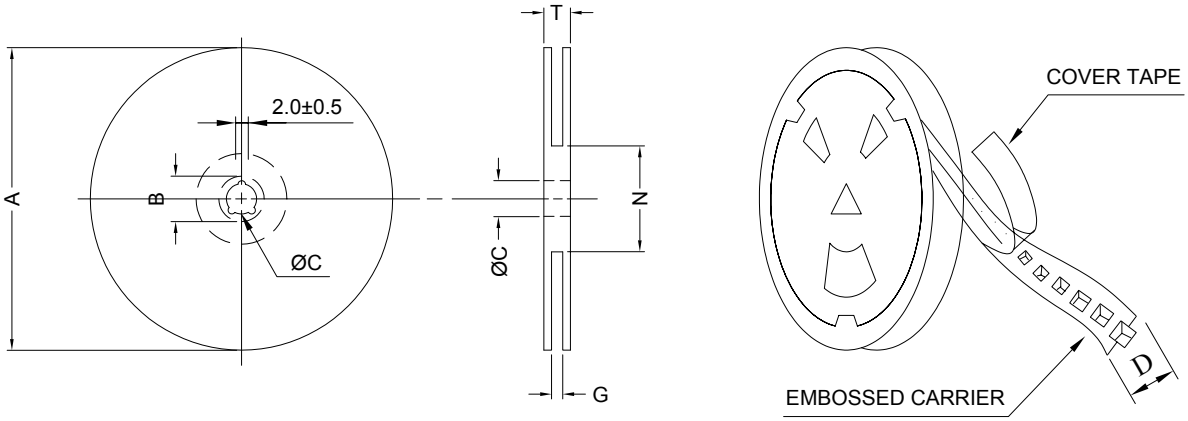
NOTE : Specifications subject to change without notice. Please check our website for latest information.

RECOMMENDED SOLDERING CONDITIONS
REFLOW SOLDERINGS

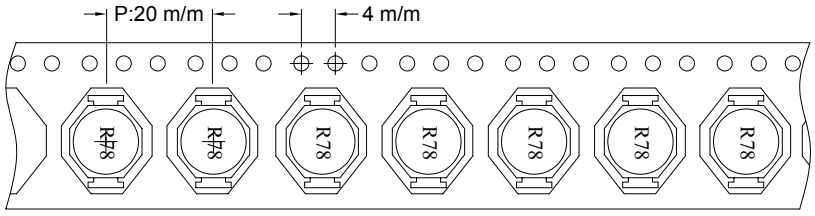


8. PACKAGING INFORMATION :

(1) CONFIGURATION



* CARRIER TAPE WIDTH : D



(2) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
13-32	330	21±0.8	13	32	34^{+0}	100^{-0}	38.4

(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)
PDH5022	250	1250	13-32	1000	8.5	40 x 40 x 26

RoHS Compliant

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9. RELIABILTY 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. (15 MINUTES) → -25±2°C (30 MINUTES) ROOM TEMP. (15 MINUTES) → 85±2°C (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

RoHS Compliant

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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	
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
HAI/U	Polyester(Amide)(Imide)	Polyamideimide	MW35,73	200
UEW-NY/U	Polyurethane	Polyamide	MW80-C	155
			MW28-C	130

Marking: Company name and material designation or marked designation on package or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions

1/3/2001 Underwriters Laboratories Inc. Card 1 of 2

QMFZ2 January 15, 1991

Component-Plastics

SUMITOMO BAKELITE CO LTD E41429 (M)

(11-cont. from I card)

PM-9630	BK	0.40	94V-0	150	150	150	—	—	—	—	—
		0.51	94V-0	150	150	150	0	0	—	—	—
		3.18	94V-0	150	150	150	0	1	0	4	3
PM-8315	BK	0.50	94V-0	150	150	150	3	0	0	—	—
PM-8315J	BN	0.71	94V-0	150	150	150	2	0	0	—	—
		1.47	94V-0	150	150	150	0	2	0	—	—
		3.05	94V-0	150	150	150	0	1	0	5	4
		6.10	94V-0	150	150	150	0	1	0	5	4
PM-8315K	BK	0.78	94V-1	150	150	150	—	—	—	—	—
		1.52	94V-0	150	150	150	—	—	—	—	—
PM-8320J	BK	0.71	94HB	150	150	150	—	—	—	—	—
PM-8330	BK	0.71	94V-1	150	150	150	—	—	—	—	—
		1.57	94V-0	150	150	150	—	—	—	—	—
PM-8400	BK	0.71	94HB	150	150	150	—	—	—	—	—
PM-9830	BK	0.69	94V-0	150	150	150	0	0			
		3.18	94V-0	150	150	150	0	0	0	4	3

Reports: March 29, 1985: May 14, 1974: September 16, 1971: September 16, 1971: September 16, 1971: September 16, 1971: March 29, 1985.

Replaces E4142911 dated February 28, 1990. (Cont. on J card)

683540014 N7047 Underwriters Laboratories Inc. ® D11/0043416

RoHS Compliant