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PART DESCRIPTION: SHIELDED SMD POWER INDUCTORS

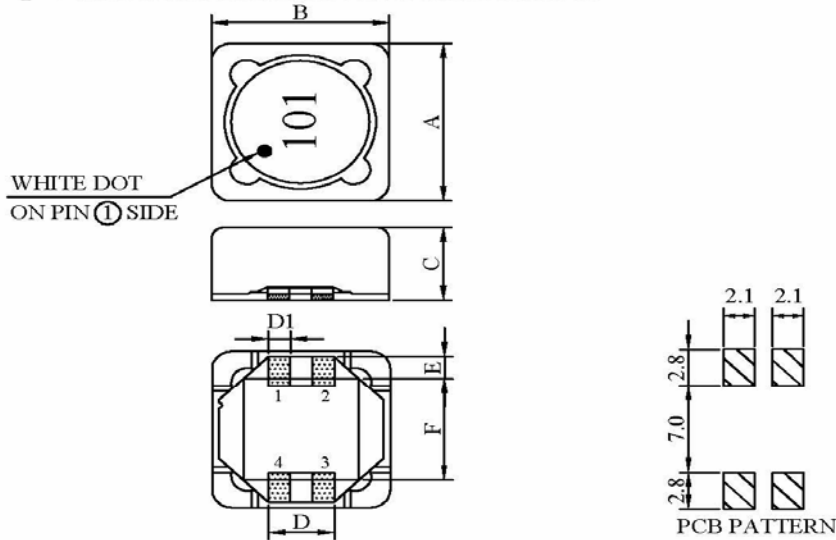
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PART NO:

XPW-GPB1207100MZF

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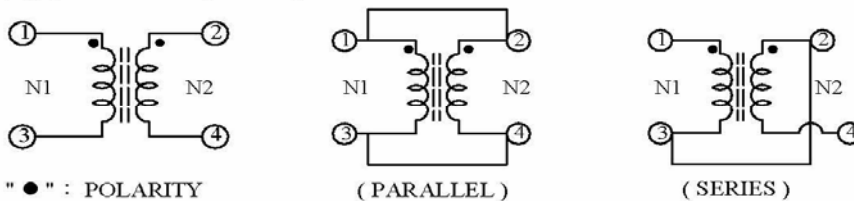
I . CONFIGURATION & DIMENSIONS :



Unit : m/m

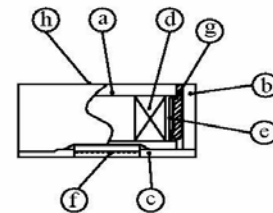
A	B	C	D	D1	E	F
12.5±0.30	12.5±0.30	8.00 MAX.	5.00REF	1.70±REF	2.20±REF	7.60±REF

II . SCHEMATIC DIAGRAM :



III . MATERIALS :

- a . CORE : FERRITE CORE DR 9.6 x 7.0
- b . CORE : FERRITE CORE RI 12.5 x 10.5 x 6.8
- c . BASE : LCP-E4008
- d . WIRE : ENAMELLED COPPER WIRE [2-UEWF]
- e . TAPE : #56 W=4.8 m/m
- f . TERMINAL : TINNED COPPER PLATE
- g . ADHESIVE : EPOXY RESIN
- h . INK : BON MARQUE [WHITE]



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SHERRY 12/29/11

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IV . GENERAL SPECIFICATION :

- a . $\Delta L/L_{0A}$: 30% TYP. AT Isat
- b . TEMP. RISE : 40°C TYP. AT Irms
- c . HI-POT(N1-N2) : 200VAC/3mA/1SEC
- d . OPERATING TEMP. : -40°C ----+125°C
- e . STORAGE TEMP. : -40°C ----+125°C
- f . RESISTANCE TO SOLDER HEAT : 260°C .10 SECS.

V . ELECTRICAL CHARACTERISTICS :

Part No.	TEST FREQ. (HZ)	L (μ H) REF	PARALLEL				SERIES			
			L (μ H) REF	RDC (Ω) MAX	Isat (A)	Irms (A)	L (μ H) REF	RDC (Ω) MAX	Isat (A)	Irms (A)
GPB1207R50YZ□	0.25V/100K	0.500	0.520	0.0058	35.00	13.50	1.900	0.0260	18.00	6.720
GPB12071R0YZ□	0.25V/100K	1.000	0.821	0.0085	24.00	10.00	3.284	0.0374	12.00	5.000
GPB12071R5YZ□	0.25V/100K	1.500	1.357	0.0106	19.00	8.60	5.428	0.4500	9.20	4.300
GPB12072R2YZ□	0.25V/100K	2.200	2.027	0.0127	16.00	8.30	8.108	0.0522	7.60	4.150
GPB12073R3YZ□	0.25V/100K	3.300	2.831	0.0138	14.00	8.30	11.320	0.0570	7.20	4.150
GPB12074R5YZ□	0.25V/100K	4.500	4.380	0.0169	11.80	6.50	17.520	0.0697	5.90	3.250
GPB12076R8YZ□	0.25V/100K	6.800	7.387	0.0206	9.70	5.50	29.550	0.0899	4.70	2.750
GPB12078R2YZ□	0.25V/100K	8.200	8.861	0.0223	8.50	5.30	35.440	0.0949	4.15	2.650
GPB1207100MZ□	0.25V/100K	10.00	10.47	0.0238	7.50	5.20	41.880	0.1016	3.80	2.600
GPB1207150MZ□	0.25V/100K	15.000	14.090	0.0301	6.00	4.30	56.360	0.1258	2.95	2.150
GPB1207220MZ□	0.25V/100K	22.000	22.930	0.0391	5.25	4.00	91.720	0.1570	2.60	2.000
GPB1207330MZ□	0.25V/100K	33.000	33.920	0.0600	4.15	3.23	135.700	0.2410	2.10	1.610
GPB1207470MZ□	0.25V/100K	47.000	47.050	0.0719	3.50	2.95	188.200	0.2880	1.80	1.470
GPB1207680MZ□	0.25V/100K	68.000	66.480	0.1050	2.95	2.44	265.900	0.4210	1.50	1.220
GPB1207820MZ□	0.25V/100K	82.000	79.750	0.1430	2.75	2.09	319.000	0.5730	1.40	1.040
GPB1207101MZ□	0.25V/100K	100.000	99.310	0.1630	2.56	1.96	397.200	0.6530	1.28	0.980
GPB1207151MZ□	0.25V/100K	150.000	144.900	0.2470	2.10	1.59	579.600	0.9890	1.05	0.796
GPB1207221MZ□	0.25V/100K	220.000	221.500	0.3760	1.64	1.29	886.000	1.5000	0.84	0.645
GPB1207331MZ□	0.25V/100K	330.000	323.600	0.5740	1.40	1.04	1294.000	2.3000	0.72	0.522
GPB1207471MZ□	0.25V/100K	470.000	467.100	0.8610	1.17	0.85	1868.000	3.4400	0.55	0.427
GPB1207681MZ□	0.25V/100K	680.000	676.700	1.0800	0.93	0.76	2707.000	4.3200	0.43	0.380
GPB1207821MZ□	0.25V/100K	821.000	818.100	1.4700	0.86	0.65	3272.000	5.8800	0.41	0.325
GPB1207102MZ□	0.25V/100K	1000.00	1005.00	1.6600	0.75	0.61	4637.333	6.6400	0.35	0.307

M= ± 20% Y= ± 30%

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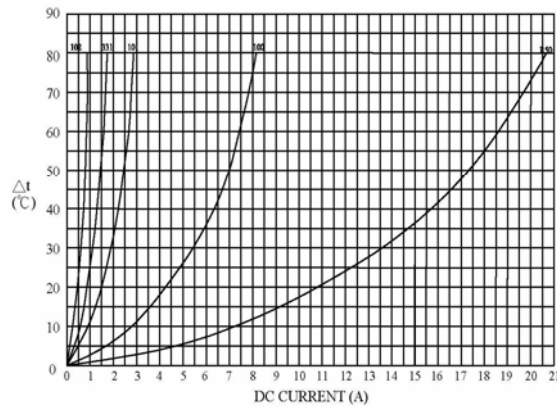
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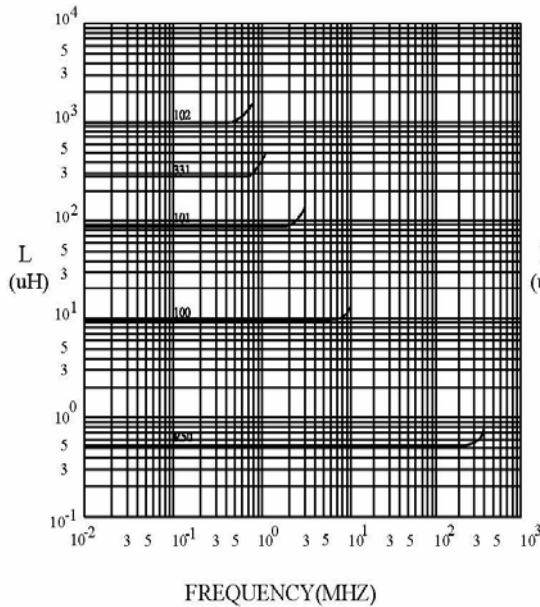
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PARALLEL

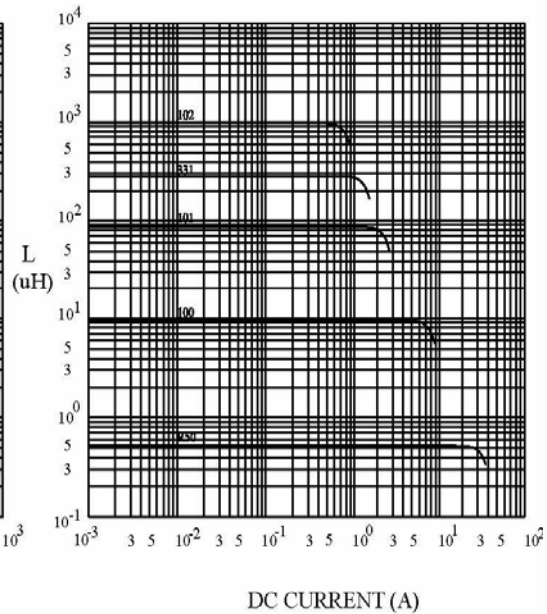
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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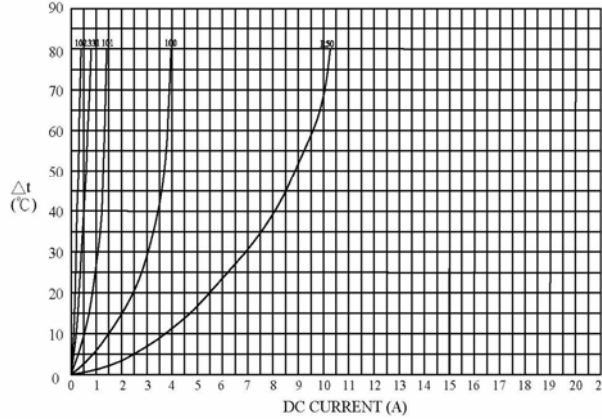
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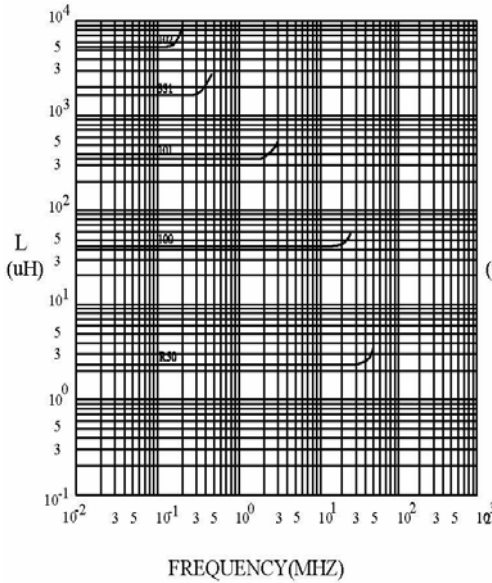
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SERIES

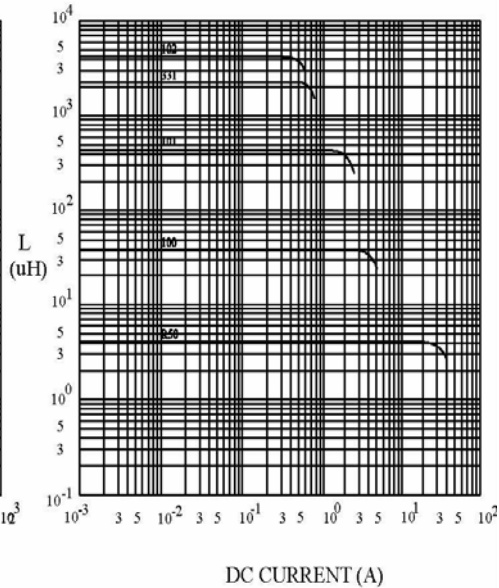
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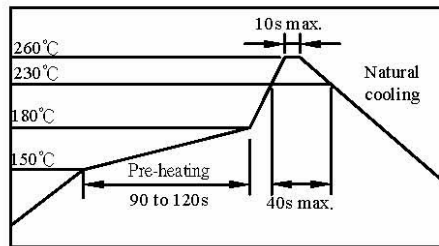
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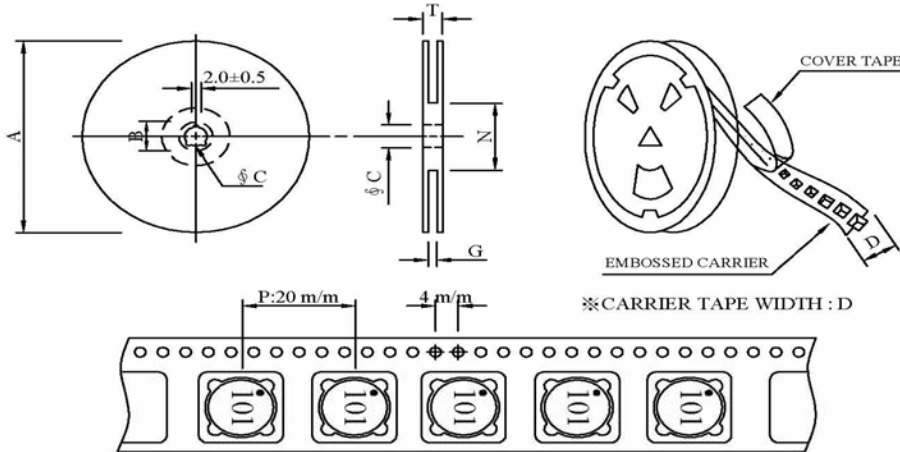
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RECOMMENDED SOLDERING CONDITIONS
REFLOW SOLDERINGS

VI . PACKAGING INFORMATION :

(1) CONFIGURATION



(2) DIMENSIONS

Unit:m/m

STYLE	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	50 ⁻⁰	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)
GPB1207	400	2,100	13 - 24	1600	11.9	38 x 36.5 x 21

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C

D

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C

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REVISION:

VII . Part No. EXPRESSION :

G	P	B	1	2	0	7						
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APPENDIX CODE 2

APPENDIX CODE 1

TOLERANCE CODE

ELECTRICAL CODE

DIMENSION CODE

TYPE CODE

APPENDIX CODE 1 : X,Y,Z : STANDARD PRODUCTS

A~W : SPECIAL PRODUCTS

APPENDIX CODE 2 :

CODE	INNER PACKAGE	INNER PACKAGE Q'TY	REMARK
F	T/R (REEL PACKAGE)	400 PCS	LEADFREE

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VIII . RELIABILITY TEST :

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°C±5°C FLUX : ROSIN DIP TIME : 4±1 SECONDS
THERMAL SHOCK TEST (TEMP. CYCLE)	INDUCTANCE SHALL NOT CHANGE MORE THAN ±20%	ROOM TEMP. → $\frac{-25\pm 2\text{ }^{\circ}\text{C}}{30\text{ MINUTES}}$ ROOM TEMP. → $\frac{85\pm 2\text{ }^{\circ}\text{C}}{30\text{ MINUTES}}$ 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

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D