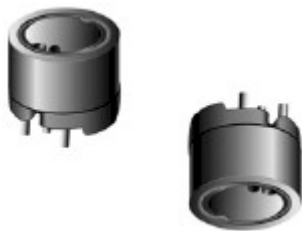


## DRGR

### DIP POWER INDUCTOR



#### Applications

- Personal computers.
- Variety of battery power equipment.
- DC power supply circuits.

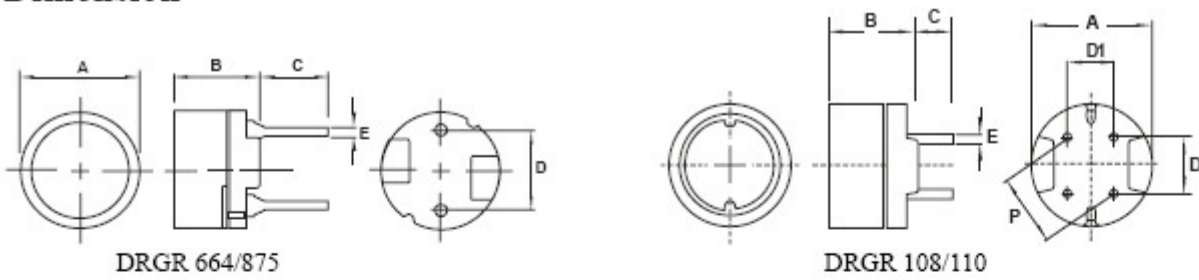
#### Features

- Magnetically shielded & DIP type.
- Comparatively range rated current and high inductance.
- Low radiation and high dip stability.

#### Inductance and rated current ranges

- DRGR664 22~1000  $\mu$ H 0.96~0.14A
- DRGR875 22~10000  $\mu$ H 1.60~0.074A
- DRGR108 10~1000  $\mu$ H 2.80~0.28A
- DRGR110 10~1000  $\mu$ H 3.51~0.35A

## Dimension



Unit: mm

Codes	A	B	C	D	D1	E	P
DRGR664	6.0±0.5	6.5 Max	4.0±1.0	4.0±0.3	-	0.50±0.1	-
DRGR875	7.8±0.5	7.5 Max	5.0±1.0	5.0±0.3	-	0.70±0.1	-
DRGR108	10.5±0.5	8.0 Max	3.5±1.0	5.0±0.3	4.0±0.3	0.70±0.1	6.40±0.5
DRGR110	10.5±0.5	10.5±0.5	3.5±1.0	5.0±0.3	4.0±0.3	0.70±0.1	6.40±0.5

## Product Identification

DRGR 664 K B 100

(1) (2) (3) (4) (5)

(1)Type: Dip Choke Coils

(2)Type: core

(3) Inductance tolerance J=±5% K= ±10% M=±20%

(4) Package: Bulk.

(5) Inductance: 100 for 10μH



## Electrical Characteristics

### DRGR 664 / 875 / 108 / 110 TYPE

Part No.	L1 (μH)	Test Freq. @0.1V (KHz)	DC Resistance (Ω) Max				Rated DC Current (A) Max			
			664	875	108	110	664	875	108	110
100M	10	100	-	-	0.05	0.023	-	-	2.80	3.51
120M	12	100	-	-	0.06	0.024	-	-	2.50	3.24
150M	15	100	-	-	0.07	0.036	-	-	2.30	2.88
180M	18	100	-	-	0.08	0.039	-	-	2.10	2.61
220M	22	100	0.13	0.08	0.09	0.042	0.96	1.60	2.00	2.34
270M	27	100	0.18	0.10	0.10	0.045	0.87	1.40	1.76	2.16
330M	33	100	0.21	0.14	0.11	0.057	0.78	1.30	1.60	1.89
390M	39	100	0.26	0.15	0.12	0.076	0.72	1.20	1.38	1.80
470M	47	100	0.29	0.17	0.14	0.100	0.66	1.10	1.28	1.62
560M	56	100	0.33	0.19	0.15	0.110	0.60	0.99	1.20	1.44
680M	68	100	0.36	0.21	0.16	0.150	0.55	0.89	1.00	1.35
820M	82	100	0.39	0.27	0.18	0.160	0.50	0.81	0.96	1.26
101K	100	1	0.54	0.32	0.20	0.190	0.45	0.74	0.92	1.08
121K	120	1	0.62	0.36	0.24	0.210	0.41	0.67	0.80	0.99
151K	150	1	0.72	0.51	0.35	0.230	0.37	0.60	0.73	0.90
181K	180	1	0.88	0.57	0.40	0.260	0.34	0.55	0.64	0.82
221K	220	1	0.99	0.76	0.54	0.290	0.30	0.50	0.61	0.74
271K	270	1	1.52	0.86	0.76	0.360	0.27	0.45	0.56	0.67
331K	330	1	1.69	0.97	0.86	0.510	0.25	0.41	0.50	0.61
391K	390	1	1.85	1.28	0.93	0.690	0.23	0.37	0.44	0.55
471K	470	1	2.85	1.44	1.23	0.980	0.21	0.34	0.41	0.51
561K	560	1	3.21	1.61	1.34	1.100	0.19	0.31	0.38	0.46
681K	680	1	3.60	2.07	1.53	1.200	0.17	0.28	0.34	0.42
821K	820	1	4.87	2.33	2.10	1.300	0.16	0.26	0.32	0.38
102K	1000	1	5.56	2.72	2.30	1.500	0.14	0.23	0.28	0.35
122K	1200	1	-	3.98	-	-	-	0.21	-	-
152K	1500	1	-	4.50	-	-	-	0.19	-	-
182K	1800	1	-	6.81	-	-	-	0.17	-	-
222K	2200	1	-	7.56	-	-	-	0.16	-	-
272K	2700	1	-	8.54	-	-	-	0.14	-	-
332K	3300	1	-	9.74	-	-	-	0.13	-	-
392K	3900	1	-	12.90	-	-	-	0.12	-	-
472K	4700	1	-	14.70	-	-	-	0.11	-	-
562K	5600	1	-	20.40	-	-	-	0.099	-	-
682K	6800	1	-	23.00	-	-	-	0.089	-	-
822K	8200	1	-	30.60	-	-	-	0.081	-	-
103K	10000	1	-	35.00	-	-	-	0.074	-	-

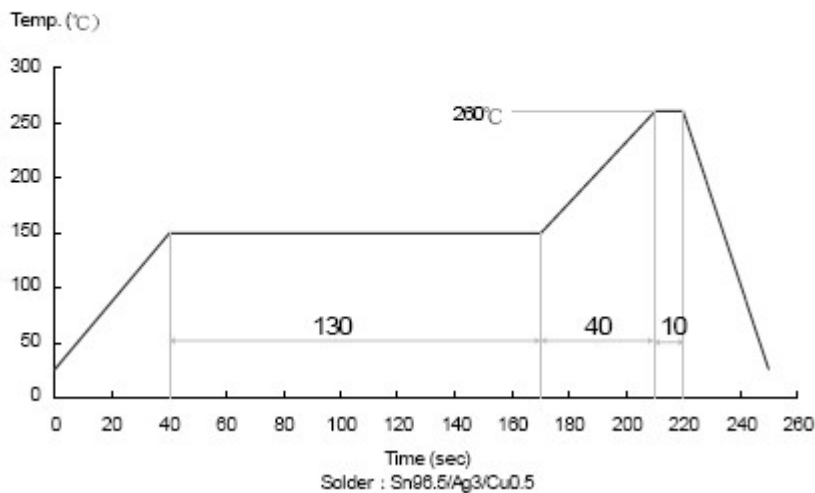
1. Rated DC Current: The current when the inductance decrease to 90% of its initial value. (Ta=25°C)

2. Operating temperature range -30~100°C.

## Package

Series	Parts plate	Parts per box
DRGR664	220/plate	1100/box
DRGR875	176/plate	880/box
DRGR108	176/plate	880/box
DRGR110	132/plate	660/box

## Reflow



## Reliability of DIP Ferrite Wire Wound Power Inductor

### Mechanical Performance

No	Item	Specification	Test Method
1-1-1	Vibration	Appearance: No damage L change: within±10% Q change: within±30% RDC: within specification	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs
1-1-2	Resistance to Soldering Heat	Appearance: No Damage	Pre-heating: 150°C, 1Min. Solder Composition: Sn/Ag/Cu=95.6/3.0/0.5 Solder Temperature: 260±5°C Immersion Time: 4±1Sec.
1-1-3	Solderability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating: 150°C, 1min Solder Composition: Sn/Ag/Cu=95.6/3.0/0.5 Solder Temperature: 245±5°C Immersion Time: 4±1sec



**Environmental Performance**

No	Item	Specification	Test Method															
1-2-1	Temperature Shock	Appearance: No damage L change: within±10% Q change: within±30% RDC: within specification	10 cycles (Air to Air) 1 cycles shall consist of: 30 minutes exposure to -55 °C 30 minutes exposure to 125 °C 15 seconds maximum transition between temperatures															
1-2-2	Temperature Cycle		One cycle: <table border="1"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25±2</td> <td>3</td> </tr> </tbody> </table>	Step	Temperature (°C)	Time (min)	1	-25±3	30	2	25±2	3	3	85±3	30	4	25±2	3
Step	Temperature (°C)		Time (min)															
1	-25±3		30															
2	25±2		3															
3	85±3	30																
4	25±2	3																
1-2-3	Humidity Resistance	Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs																
1-2-4	Heat Temperature Resistance	Temperature: 85±3°C Relative Humidity: 20% Applied Current: Rated Current Time: 1000hrs Measured after exposure in the room condition for 24hrs																
1-2-5	Low Temperature Resistance	Temperature: -25±3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs																

\* Storage Temperature :25±3°C;<80%RH