# Panasonic

# **Power Inductors**

# Power Inductors / Wire Wound type

Series : G Type : ELL6GG ELL6PG



### Features

- Magnetic shielded structure
- Low DC resistance and large current capability
- RoHS compliant

### **Recommended Applications**

• DSC, Tablet terminal, Portable game device, DC/DC converter circuit for cellular phone

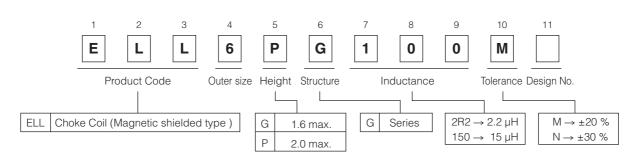
# **Standard Packing Quantity**

• 1,000 pcs./reel

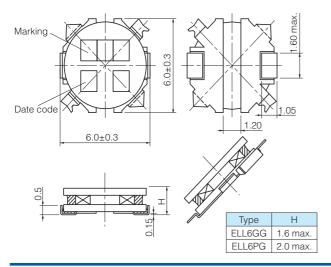
## ■ As for Soldering Conditions and Safety Precautions,

Please see Data Files

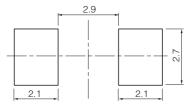
### **Explanation of Part Numbers**



## Dimensions in mm (not to scale)



Recommended land patterns in mm (not to scale)



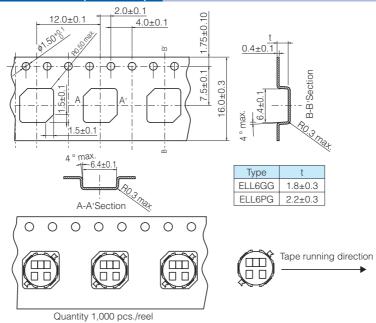
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

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Standar	d Parts							
Series	Part No.	Inductance (100 kHz)		R <sub>DC</sub> (at 20 °C)		Saturation Rated Current*1	Temperature Rise Current*2	Marking
		(µH)	Tol.	(m $\Omega$ )	Tol.	(mA max.)	(mA max.)	
Series 6GG	ELL6GG1R0N	1.0	±30 %	27	±20 %	2500	2500	1R0
	ELL6GG1R5N	1.5		36		2300	2250	1R5
	ELL6GG2R2M	2.2	±20 %	45		1950	2000	2R2
	ELL6GG2R7M	2.7		54		1850	1800	2R7
	ELL6GG3R9M	3.9		60		1650	1700	3R9
	ELL6GG4R7M	4.7		70		1400	1550	4R7
	ELL6GG6R8M	6.8		110		1150	1300	6R8
	ELL6GG100M	10.0		170		900	1000	100
	ELL6GG150M	15.0		210		800	900	150
	ELL6GG220M	22.0		300		620	850	220
	ELL6GG330M	33.0		510		490	580	330
	ELL6GG470M	47.0		610		400	480	470
	ELL6GG680M	68.0		860		380	410	680
	ELL6GG101M	100.0		1480		300	350	101
Series 6PG	ELL6PGR08N	0.8	±30 %	24	±20 %	3800	2800	R08
	ELL6PG1R5N	1.5		30		2500	2500	1R5
	ELL6PG2R2N	2.2		37		2200	2200	2R2
	ELL6PG3R3N	3.3		44		1700	2000	3R3
	ELL6PG3R9N	3.9		51		1600	1900	3R9
	ELL6PG4R7N	4.7		58		1500	1750	4R7
	ELL6PG5R6N	5.6		65		1450	1650	5R6
	ELL6PG6R8N	6.8		70		1400	1600	6R8
	ELL6PG100M	10.0	±20 %	110		1300	1300	100
	ELL6PG120M	12.0		140		1100	1200	120
	ELL6PG150M	15.0		150		1000	1100	150
	ELL6PG220M	22.0		230		800	900	220
	ELL6PG270M	27.0		260		730	800	270
	ELL6PG330M	33.0		300		700	750	330
	ELL6PG470M	47.0		470		550	600	470
	ELL6PG560M	56.0		520		500	550	560
	ELL6PG680M	68.0		700		420	500	680
	ELL6PG820M	82.0		800		400	450	820
	ELL6PG101M	100.0		1000		380	400	101

\*1 Saturation Rated Current : This DC current which causes a 30 % inductance reduction from its nominal value.
\*2 Temperature Rise Current : This indicates the value of current when temperature rise dt/t= 40 °C (at 20 °C).

#### Embossed Carrier Tape Dimensions in mm (not to scale)



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#### ▲ Safety Precautions

#### (Common precautions for Power Inductors / Wire Wound type)

- When using our products, no matter what sort of equipment they might be used for, be sure to make a written agreement on the specifications with us in advance. The design and specifications in this catalog are subject to change without prior notice.
- Do not use the products beyond the specifications described in this catalog.
- This catalog explains the quality and performance of the products as individual components. Before use, check and evaluate their operations when installed in your products.
- Install the following systems for a failsafe design to ensure safety if these products are to be used in equipment where a defect in these products may cause the loss of human life or other significant damage, such as damage to vehicles (automobile, train, vessel), traffic lights, medical equipment, aerospace equipment, electric heating appliances, combustion/gas equipment, rotating equipment, and disaster/crime prevention equipment.
- $\ensuremath{\boldsymbol{\ast}}$  Systems equipped with a protection circuit and a protection device
- \*Systems equipped with a redundant circuit or other system to prevent an unsafe status in the event of a single fault

#### $\triangle$ Precautions for use

#### 1. Operation range and environments

- ① These products are designed and manufactured for general and standard use in general electronic equipment (e.g. AV equipment, home electric appliances, office equipment, information and communication equipment)
- ② These products are not intended for use in the following special conditions. Before using the products, carefully check the effects on their quality and performance, and determine whether or not they can be used.
  - In liquid, such as water, oil, chemicals, or organic solvent
  - In direct sunlight, outdoors, or in dust
  - In salty air or air with a high concentration of corrosive gas, such as Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, or NO<sub>2</sub>
  - In an environment where these products cause dew condensation

#### 2. Handling

- ① Do not bring magnets or magnetized materials close to the product. The influence of their magnetic field can change the inductance value.
- ② Do not apply strong mechanical shocks by either dropping or collision with other parts. Excessive shock can damage the part.

#### 3. Washing of board

Kindly consult the Technical department before washing of the PWB with any cleansing agent, and provide the washing condition.

#### 4. Resoldering with a soldering iron

The temperature of the tip of the soldering iron should be 360 °C or less, 4 seconds. And resoldering with a soldering iron should be limited to 1 time, and after that should be cooling these.

#### 5. Mounting side

External force must be less than 5.0 [N] : while mounting.

#### 6. Storage conditions

Normal temperature (-5 to 35 °C), normal humidity (85 % RH max.), shall not be exposed to direct sunlight and harmful gases and care should be taken so as not to cause dew.

#### <Package markings>

Package markings include the product number, quantity, and country of origin. In principle, the country of origin should be indicated in English.