ELL-4GG1R8N Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	ELL-4GG1R8N-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	ELL-4GG1R8N
Description	FIXED IND 1.8UH 1.55A 71MOHM SMD
Detailed Description	1.8 µH Shielded Wirewound Inductor 1.55 A 71mOhm Nonstandard

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
ELL-4GG1R8N	Panasonic Electronic Components
Series:	Product Status:
G	Obsolete
Type:	Material - Core:
Wirewound	-
Inductance:	Tolerance:
1.8 µH	±30%
Current Rating (Amps):	Current - Saturation (Isat):
1.55 A	1.9A
Shielding:	DC Resistance (DCR):
Shielded	71mOhm
Q @ Freq:	Frequency - Self Resonant:
-	-
Ratings:	Operating Temperature:
-	-
Inductance Frequency - Test:	Mounting Type:
100 kHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	-
Size / Dimension:	Height - Seated (Max):
0.150" L x 0.150" W (3.80mm x 3.80mm)	0.055" (1.40mm)
Base Product Number:	
ELL-4GG	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
ECCN:	HTSUS:
EAR99	8504.50.8000

Panasonic

Power Inductors

Power Inductors / Wire Wound type

Discontinued

Series : **G**
Type : **ELL4FG-A**
ELL4GG
ELL4LG-A

Type ELL4FG–A

Type ELL4GG


Type ELL4LG–A

Features

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

Recommended Applications

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

Standard Packing Quantity

- 2,000 pcs./reel (ELL4FG-A/ELL4GG)
- 3,000 pcs./reel (ELL4LG-A)

■ As for Soldering Conditions and Safety Precautions,

Please see Data Files

Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11
E	L	L	4	F	G	1	0	0	M	
Product Code			Outer size	Height	Structure	Inductance			Tolerance	Design No.

ELL	Choke Coil (Magnetic shielded type)

F	1.2 max.
G	1.4 max.
L	1.8 max.

G	Series

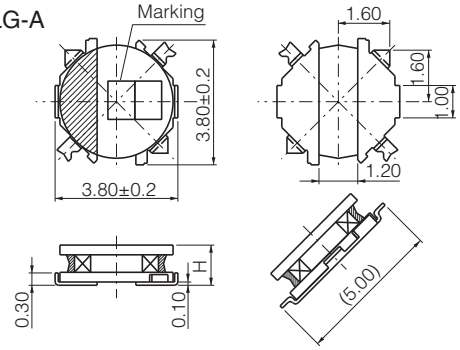
2R2 → 2.2 µH
150 → 15 µH

M → ±20 %
N → ±30 %

F	A
G	—
L	A

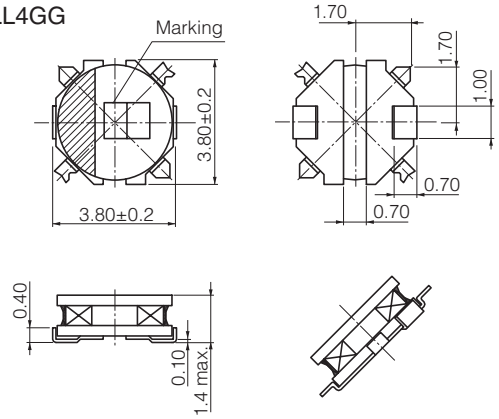
Dimensions in mm (not to scale)

- ELL4FG-A
- ELL4LG-A



Type	H
ELL4FG-A	1.1±0.10 (1.20 max.)
ELL4LG-A	1.80 max.

- ELL4GG



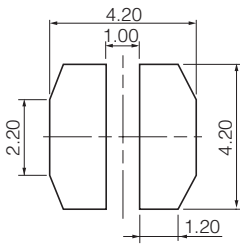
Panasonic

Power Inductors

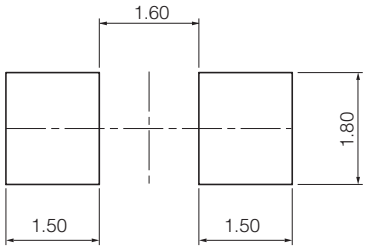
Discontinued

Recommended land patterns in mm (not to scale)

- ELL4FG-A
- ELL4LG-A



- ELL4GG



Standard Parts

Series	Part No.	Inductance (100 kHz)		RDC (at 20 °C)		Saturation Rated Current*1 (mA max.)	Temperature Rise Current*2 (mA max.)	Marking
		(μH)	Tol.	(mΩ)	Tol.			
Series 4FG-A	ELL4FG1R0NA	1.0	±30 %	45	±20 %	1900	1950	01
	ELL4FG1R5NA	1.5		60		1600	1700	06
	ELL4FG2R0NA	2.0		70		1300	1550	10
	ELL4FG3R3NA	3.3		110		1100	1220	16
	ELL4FG4R7NA	4.7		160		1000	1000	21
	ELL4FG6R8NA	6.8		220		800	860	26
	ELL4FG100MA	10.0	±20 %	290		700	750	31
	ELL4FG150MA	15.0		480		600	580	33
	ELL4FG220MA	22.0		620		420	500	36
	ELL4FG330MA	33.0		1060		360	400	39
	ELL4FG470MA	47.0		1600		290	330	51
Series 4GG	ELL4GG1R2N	1.2	±30 %	50	±20 %	2400	1900	03
	ELL4GG1R8N	1.8		71		1900	1550	09
	ELL4GG2R2N	2.2		88		1700	1400	11
	ELL4GG3R3N	3.3		110		1500	1200	16
	ELL4GG3R9N	3.9		120		1400	1150	19
	ELL4GG4R7N	4.7		160		1200	1000	21
	ELL4GG5R6N	5.6		170		1100	970	23
	ELL4GG6R8N	6.8		200		1050	930	26
	ELL4GG8R2N	8.2		220		1000	870	29
	ELL4GG100M	10.0	±20 %	250		900	770	31
	ELL4GG120M	12.0		380		800	650	32
	ELL4GG150M	15.0		500		700	580	33
	ELL4GG220M	22.0		640		600	500	36
	ELL4GG330M	33.0		980		450	400	39
	ELL4GG470M	47.0		1250		400	350	51
	ELL4GG101M	100.0		2400		290	250	56
Series 4LG-A	ELL4LG1R0NA	1.0	±30 %	43	±20 %	2200	1900	01
	ELL4LG1R5NA	1.5		48		1700	1800	06
	ELL4LG2R2NA	2.2		55		1500	1700	11
	ELL4LG2R7NA	2.7		63		1400	1550	13
	ELL4LG3R3NA	3.3		72		1300	1450	16
	ELL4LG4R7NA	4.7		90		1100	1300	21
	ELL4LG6R2NA	6.2		140		930	1100	25
	ELL4LG100MA	10.0	±20 %	200		800	950	31
	ELL4LG150MA	15.0		300		620	730	33
	ELL4LG220MA	22.0		390		550	640	36
	ELL4LG330MA	33.0		610		430	510	39
	ELL4LG470MA	47.0		920		360	410	51
	ELL4LG680MA	68.0		1300		270	350	53
	ELL4LG101MA	100.0		2200		250	260	56
	ELL4LG151MA	150.0		3000		220	220	59

*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).

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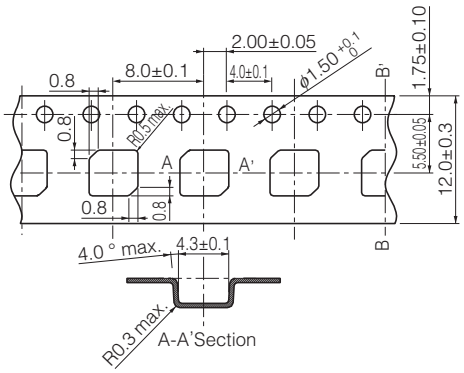
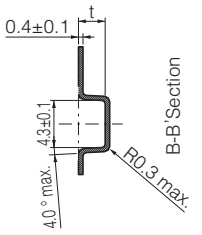
Power Inductors

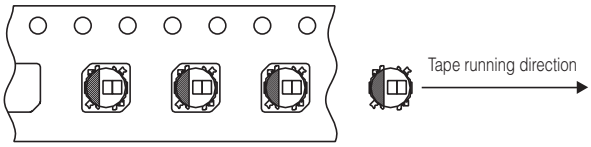
Discontinued

Embossed Carrier Tape Dimensions in mm (not to scale)





Type	t
ELL4FG-A	1.4±0.3
ELL4GG	1.6±0.3
ELL4LG-A	2.0±0.3



Quantity 2,000 pcs./reel (ELL4FG-A/ELL4GG)
Quantity 3,000 pcs./reel (ELL4LG-A)

⚠ 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.

✻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

⚠ 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_2, H_2S, NH_3, SO_2, or NO_2
- 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.

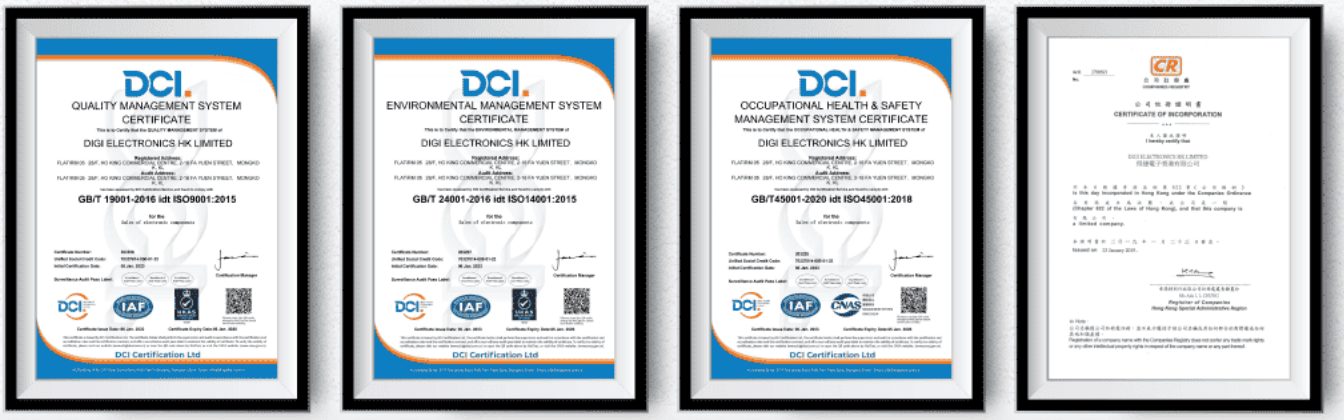
5. Mounting side
External force must be less than 5.0 [N] : while mounting.

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.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com



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DiGi is a global authorized distributor of electronic components.