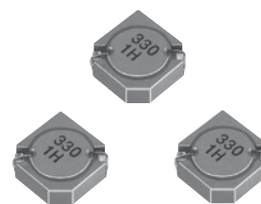




Power Inductors / Wire Wound type

Series : **P**
Type : **ELLCTP**



Features

- Magnetic shielded structure
- Low DC resistance and large current capability
- Available on tape and reel for automatic insertion
- RoHS compliant

Recommended Applications

- Audiovisual equipment, Appliance, Office automation equipment, Amusement machine, Power circuit for electric device

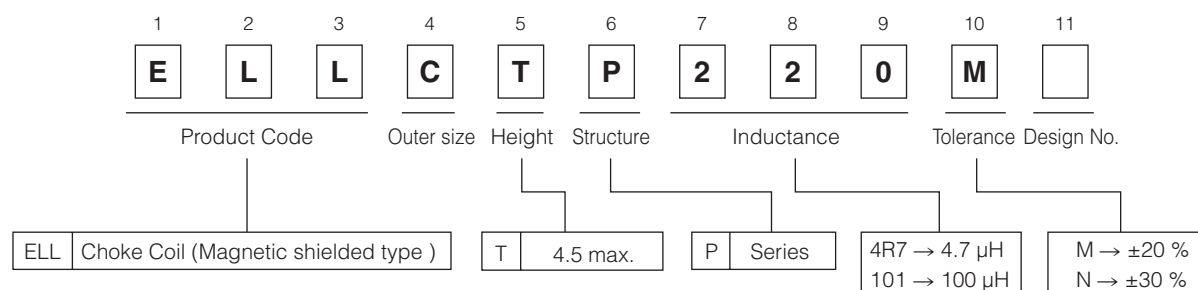
Standard Packing Quantity

- 500 pcs./reel

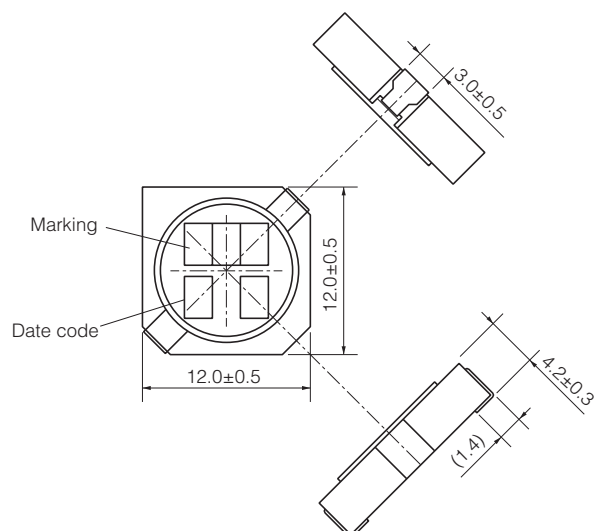
As for Soldering Conditions and Safety Precautions,

Please see Data Files

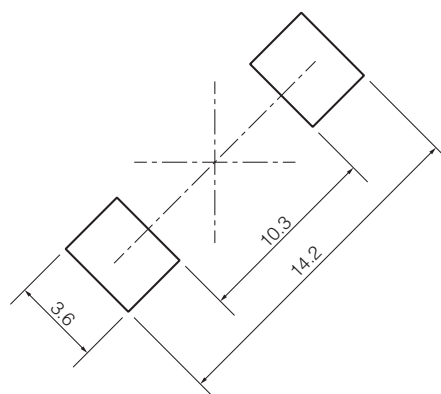
Explanation of Part Numbers



Dimensions in mm (not to scale)



Recommended land patterns in mm (not to scale)



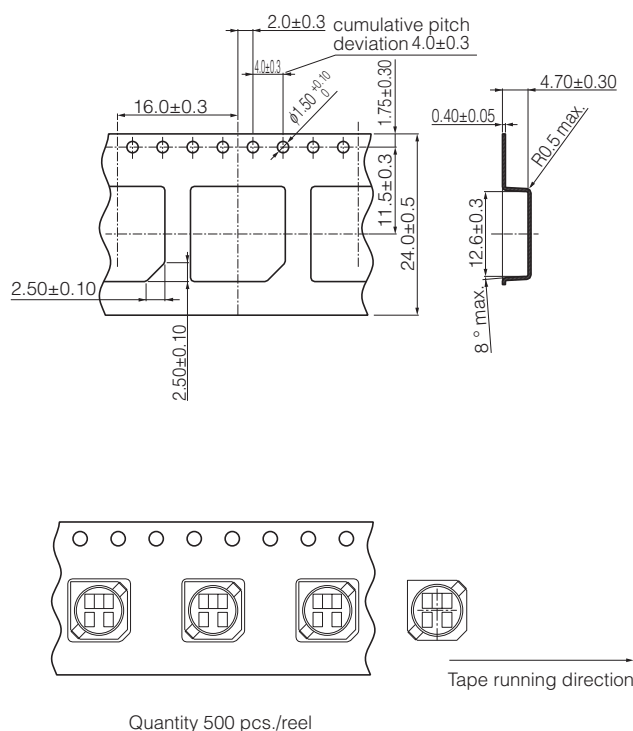
Standard Parts

Part No.	Inductance (100 kHz)		R _{DC} (at 20 °C)		Saturation Rated Current* ¹ (mA max.)	Temperature Rise Current* ² (mA max.)	Marking
	(μH)	Tol.	(mΩ)	Tol.			
ELLCTP1R2NB	1.2	±30 %	4.6	±30 %	11000	7000	1R2
ELLCTP2R0NB	2.0		5.6		9000	6500	2R0
ELLCTP3R3NB	3.3		7.0		7000	5800	3R3
ELLCTP4R3NB	4.3		8.5		6000	5000	4R3
ELLCTP5R6NB	5.6		10.0		5500	4500	5R6
ELLCTP6R8NB	6.8		12.5		5000	4000	6R8
ELLCTP9R1NB	9.1	±20 %	15.0	±20 %	4400	3800	9R1
ELLCTP150MB	15.0		27.0		3100	3100	150
ELLCTP220MB	22.0		34.0		2600	2600	220
ELLCTP330MB	33.0		52.0		2200	2100	330
ELLCTP470MB	47.0		72.0		1900	1800	470
ELLCTP680MB	68.0		97.0		1500	1500	680
ELLCTP101MB	100.0		150.0		1200	1200	101
ELLCTP151MB	150.0		220.0		1050	1000	151
ELLCTP221MB	220.0		310.0		900	850	221
ELLCTP331MB	330.0		500.0		750	700	331
ELLCTP471MB	470.0		670.0		600	550	471
ELLCTP681MB	680.0		1070.0		550	450	681
ELLCTP102MB	1000.0		1470.0		400	400	102

*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 $\Delta t/t = 40$ °C (at 20 °C).

Embossed Carrier Tape Dimensions in mm (not to scale)



Guidelines and precautions regarding the technical information and use of our products described in this online catalog.

- If you want to use our products described in this online catalog for applications requiring special qualities or reliability, or for applications where the failure or malfunction of the products may directly jeopardize human life or potentially cause personal injury (e.g. aircraft and aerospace equipment, traffic and transportation equipment, combustion equipment, medical equipment, accident prevention, anti-crime equipment, and/or safety equipment), it is necessary to verify whether the specifications of our products fit to such applications. Please ensure that you will ask and check with our inquiry desk as to whether the specifications of our products fit to such applications use before you use our products.
- The quality and performance of our products as described in this online catalog only apply to our products when used in isolation. Therefore, please ensure you evaluate and verify our products under the specific circumstances in which our products are assembled in your own products and in which our products will actually be used.
- If you use our products in equipment that requires a high degree of reliability, regardless of the application, it is recommended that you set up protection circuits and redundancy circuits in order to ensure safety of your equipment.
- The products and product specifications described in this online catalog are subject to change for improvement without prior notice. Therefore, please be sure to request and confirm the latest product specifications which explain the specifications of our products in detail, before you finalize the design of your applications, purchase, or use our products.
- The technical information in this online catalog provides examples of our products' typical operations and application circuits. We do not guarantee the non-infringement of third party's intellectual property rights and we do not grant any license, right, or interest in our intellectual property.
- If any of our products, product specifications and/or technical information in this online catalog is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially with regard to security and export control, shall be observed.

<Regarding the Certificate of Compliance with the EU RoHS Directive/REACH Regulations>

- The switchover date for compliance with the RoHS Directive/REACH Regulations varies depending on the part number or series of our products.
- When you use the inventory of our products for which it is unclear whether those products are compliant with the RoHS Directive/REACH Regulation, please select "Sales Inquiry" in the website inquiry form and contact us.

We do not take any responsibility for the use of our products outside the scope of the specifications, descriptions, guidelines and precautions described in this online catalog.

⚠ 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 Cl₂, H₂S, NH₃, SO₂, or NO₂
 - 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.