

Type: CLS4D14

### ◆ Product Description

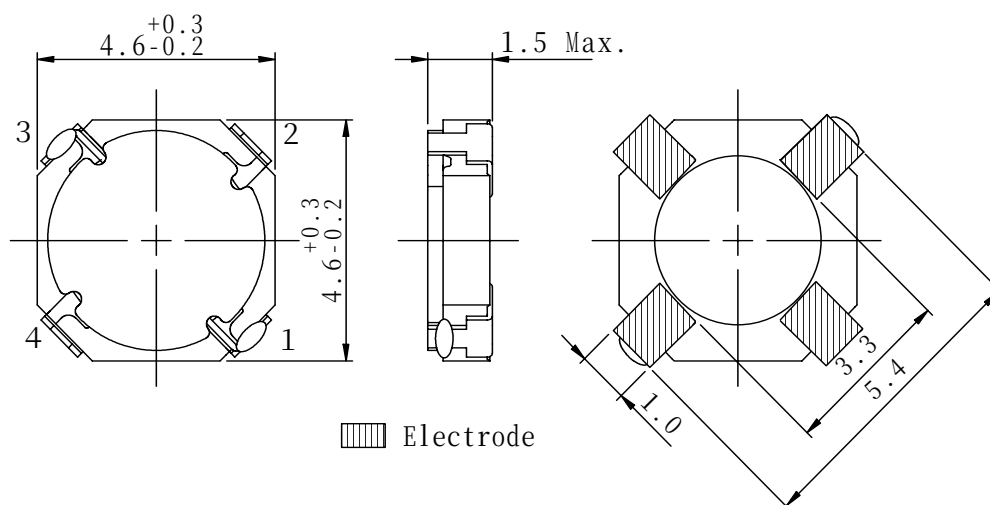
- 4.9×4.9mm Max.(L×W),1.5mm Max. Height.
- 4 Terminal pins' type gives a flexible design as inductors or transformers (SEPIC,ZETA circuit)
- Custom design is available.



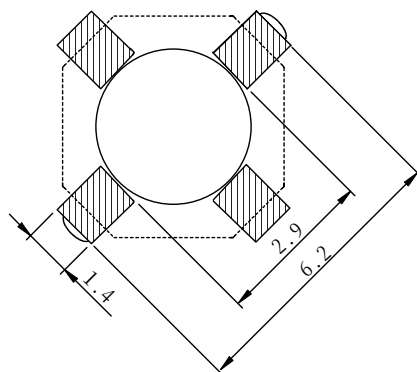
### ◆ Feature

- Max. Operating frequency 1MHz, Max.
- Ideally used in portable devices such as Mobilephone,DSC/DVC,MP3,PDA, etc as DC-DC Converter inductors, specially suitable for White LED drive.
- It is possible to output high voltage and get sufficient accuracy which is hard to obtain with an ordinary inductor.
- RoHS Compliance

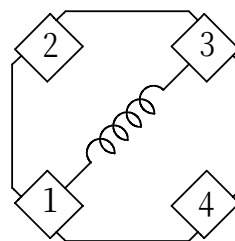
### ◆ Dimensions (mm)



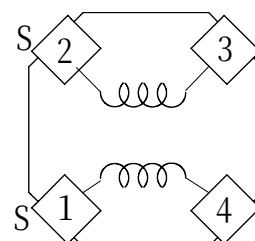
### ◆ Land Pattern (mm)



### ◆ Schematics (Bottom)



For Inductor



For 2 in 1 Transformer

Type: CLS4D14

### ◆ Specification (For Inductor)

| Part Name<br>※ | Stamp | Inductance<br>( $\mu$ H) [Within]<br>100kHz | D.C.R.(m $\Omega$ )<br>Max.(Typ.)<br>(at 20°C) | Saturation<br>Current (mA)<br>(at 20°C)※1 | Temperature<br>rise current<br>(mA) ※2 |
|----------------|-------|---------------------------------------------|------------------------------------------------|-------------------------------------------|----------------------------------------|
| CLS4D14-4R7N□  | 4R7   | 4.7 $\pm$ 30%                               | 110(85)                                        | 900                                       | 1000                                   |
| CLS4D14-6R8N□  | 6R8   | 6.8 $\pm$ 30%                               | 130(100)                                       | 800                                       | 1000                                   |
| CLS4D14-100N□  | 100   | 10 $\pm$ 30%                                | 180(140)                                       | 650                                       | 850                                    |
| CLS4D14-150N□  | 150   | 15 $\pm$ 30%                                | 270(210)                                       | 550                                       | 630                                    |
| CLS4D14-220N□  | 220   | 22 $\pm$ 30%                                | 390(300)                                       | 450                                       | 520                                    |
| CLS4D14-330N□  | 330   | 33 $\pm$ 30%                                | 560(430)                                       | 350                                       | 420                                    |
| CLS4D14-470N□  | 470   | 47 $\pm$ 30%                                | 830(640)                                       | 300                                       | 330                                    |

### ※ Description Of Part Name

CLS4D14NP—4R7N□

B Box  
 C Carrier Tape

※1. Saturation current: The DC current at which the inductance decreases to 65% of it's nominal value.

※2. Temperature rise current: The DC current at which the temperature rise is  $\Delta t=40^{\circ}\text{C}$ .( $T_a=20^{\circ}\text{C}$ ).

### ◆ Specification (For 2 in 1 Transformer)

| Sample No. | Inductance<br>(at 100kHz) | D.C.R.(m $\Omega$ )<br>Max. (at 20°C) | Rated current<br>(mA)※ |
|------------|---------------------------|---------------------------------------|------------------------|
| 5362-T033  | 9.0 $\mu$ H $\pm$ 30%     | 400                                   | 410                    |

※ Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when  $\Delta t=40^{\circ}\text{C}$ , whichever is lower( $T_a=20^{\circ}\text{C}$ ).