

# Type: CLS4D14

### Product Description

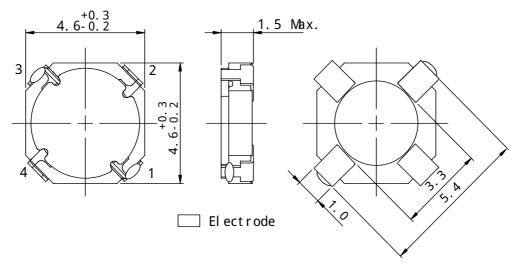
- · 4.9× 4.9mm Max.(L× W),1.5mm Max. Height.
- 4 Terminal pins' type gives a flexible design as inductors or transformers (SEPIC,ZETA circuit)
- · Custom design is available.



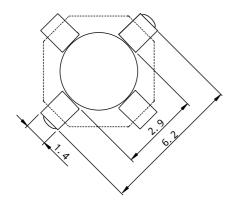
#### Feature

- · 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

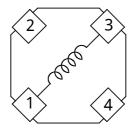
#### Dimensions (mm)



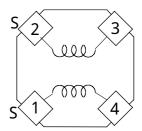
### Land Pattern (mm)



# Schematics (Bottom)



For Inductor



For 2 in 1 Transformer



Type: CLS4D14

### Specification (For Inductor)

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

#### **X** Description Of Part Name

- \* 1. Saturation current: The DC current at which the inductance decreases to 65% of it's nominal value.
- $\times$  2. Temperature rise current: The DC current at which the temperature rise is  $\triangle$  t = 40°C.(Ta = 20°C).

## Specification (For 2 in 1 Transformer)

| Sample No. | Inductance  | D.C.R.(mΩ)     | Rated current |
|------------|-------------|----------------|---------------|
|            | (at 100kHz) | Max. (at 20°C) | (mA)≋         |
| 5362-T033  | 9.0µ H± 30% | 400            | 410           |

<sup>\*</sup> Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when  $\triangle$  t=40°C, whichever is lower(Ta=20°C).