

## SMD POWER INDUCTOR CKCS Series

### 磁胶电感 CKCS 系列

#### ● FEATURES 特性

1. 表面贴装, 小型、超薄电感器, 大功率, 高饱和, 低电阻之特性.

The inductor designed as surface mounting, smallest and thinnest with high power, high saturation and low resistance

2. 磁性胶水涂敷结构极大减少了噪声, 闭合磁路结构设计, 漏磁少, 抗EMI能力强.

Magnetic-resin shielded structure reduces buzz noise to ultra-low levels, Closed magnetic circuit structure reduces magnetic leakage flux, high performance of anti-EMI.

3. 同等尺寸额定电流较传统电感高出30%以上.

Compared with the same size part, the rated current 30% higher than the traditional inductors.

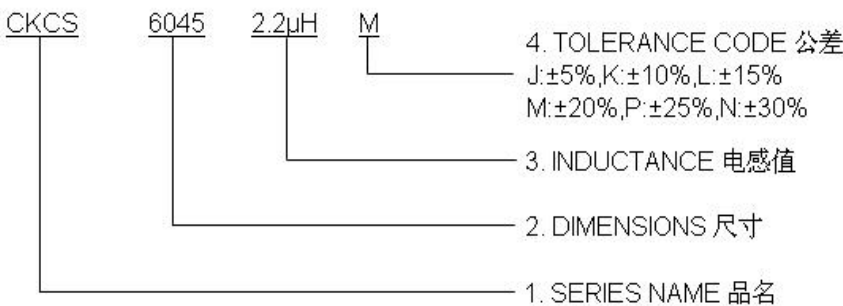


#### ● APPLICATIONS 用途

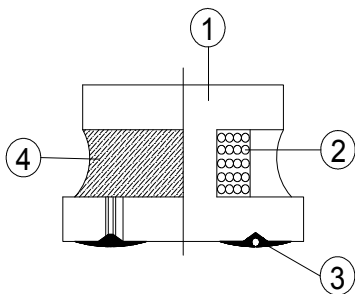
PAD, 笔记本电脑, 服务器, 音箱, 网通, 安防, 手机, 智能家居, 储能设备等

PAD, Notebook, Server, audio, netcom, security, mobile phone, smart home, Energy product...

#### ● PART NUMBERING SYSTEM 品名系统



#### ● STRUCTURAL DRAWING 结构图



- |                |                           |
|----------------|---------------------------|
| ① Ferrite core | Ni-Zn Ferrite             |
| ② Winding wire | Polyurethane-copper wire  |
| ③ Electrode    | External electrode        |
| ④ Epoxy resin  | containing ferrite powder |

● SHAPES AND DIMENSIONS 外形尺寸 (Unit:mm)

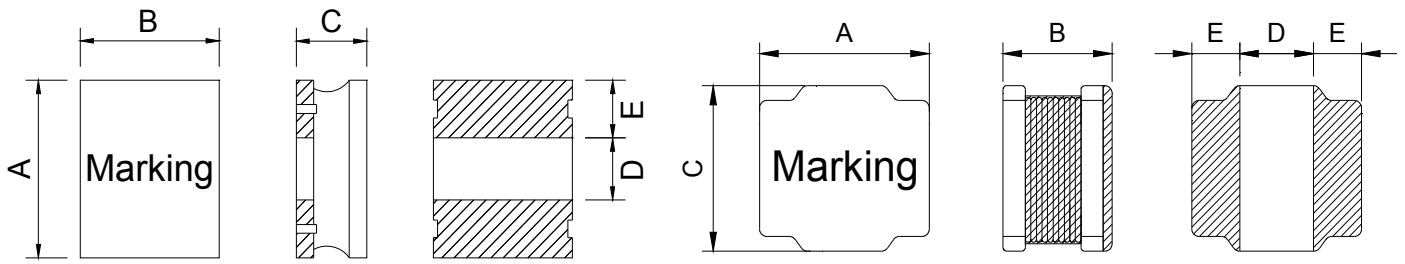


Fig 1

Fig 2

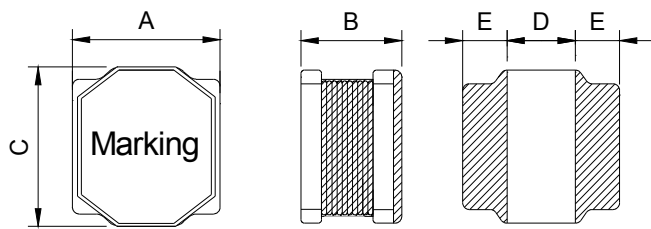
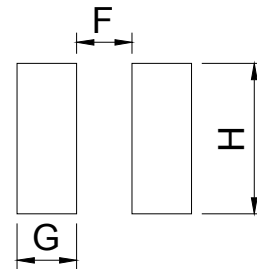


Fig 3



Recommended patterns

| TYPE(型号)   | A       | B       | C        | D        | E        | F   | G   | H   | Fig |
|------------|---------|---------|----------|----------|----------|-----|-----|-----|-----|
| CKCS201610 | 2.0±0.3 | 1.6±0.3 | 1.05 Max | 0.7±0.3  | 0.65±0.3 | 0.3 | 1.1 | 2.1 | 1   |
| CKCS252010 | 2.5±0.3 | 2.0±0.3 | 1.05 Max | 0.94±0.3 | 0.83±0.3 | 0.4 | 1.4 | 2.5 | 1   |
| CKCS252012 | 2.5±0.3 | 2.0±0.3 | 1.25 Max | 0.94±0.3 | 0.83±0.3 | 0.4 | 1.4 | 2.5 | 1   |
| CKCS3012   | 3.0±0.2 | 1.3 Max | 3.0±0.2  | 1.2±0.3  | 0.9±0.3  | 0.7 | 1.4 | 2.7 | 3   |
| CKCS3015   | 3.0±0.2 | 1.7 Max | 3.0±0.2  | 1.2±0.3  | 0.9±0.3  | 0.7 | 1.4 | 2.7 | 3   |
| CKCS4018   | 4.0±0.2 | 1.8 Max | 4.0±0.2  | 1.6±0.3  | 1.2±0.3  | 1.0 | 1.7 | 3.7 | 3   |
| CKCS4020   | 4.0±0.2 | 2.0 Max | 4.0±0.2  | 1.6±0.3  | 1.2±0.3  | 1.0 | 1.7 | 3.7 | 3   |
| CKCS4030   | 4.0±0.2 | 3.0 Max | 4.0±0.2  | 1.3±0.3  | 1.35±0.3 | 0.8 | 1.9 | 3.7 | 3   |
| CKCS5020   | 5.0±0.2 | 2.1 Max | 5.0±0.2  | 1.4±0.3  | 1.8±0.3  | 0.9 | 2.3 | 4.2 | 2   |
| CKCS5040   | 5.0±0.2 | 4.0 Max | 5.0±0.2  | 1.8±0.3  | 1.6±0.3  | 1.1 | 2.2 | 4.2 | 3   |
| CKCS6020   | 6.0±0.3 | 2.1 Max | 6.0±0.3  | 2.3±0.3  | 1.85±0.3 | 1.8 | 2.4 | 5.7 | 2   |
| CKCS6028   | 6.0±0.3 | 3.0 Max | 6.0±0.3  | 2.3±0.3  | 1.85±0.3 | 1.8 | 2.4 | 5.7 | 2   |
| CKCS6045   | 6.0±0.3 | 4.7 Max | 6.0±0.3  | 2.3±0.3  | 1.85±0.3 | 1.8 | 2.4 | 5.7 | 2   |
| CKCS8040   | 8.0±0.3 | 4.2 Max | 8.0±0.3  | 3.6±0.3  | 2.2±0.3  | 3.1 | 2.7 | 7.5 | 2   |
| CKCS8060   | 8.0±0.3 | 6.2 Max | 8.0±0.3  | 3.6±0.3  | 2.2±0.3  | 3.1 | 2.7 | 7.5 | 2   |
| CKCS8080   | 8.0±0.3 | 8.0 Max | 8.0±0.3  | 3.6±0.3  | 2.2±0.3  | 3.1 | 2.7 | 7.5 | 2   |



● SPECIFICATION TABLE 规格特性表

CKCS201610

| PART NUMBER<br>品名  | INDUCTANCE<br>(uH)<br>电感值 | DCR (Max.)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 | Marker<br>印字 |
|--------------------|---------------------------|---------------------------|----------------------------|----------------------------|--------------|
| CKCS201610-1uH/N   | 1±30%                     | 0.114                     | 1.65                       | 1.45                       | /            |
| CKCS201610-1.5uH/N | 1.5±30%                   | 0.174                     | 1.35                       | 1.25                       | /            |
| CKCS201610-2.2uH/N | 2.2±30%                   | 0.264                     | 1.10                       | 1.10                       | /            |
| CKCS201610-3.3uH/M | 3.3±20%                   | 0.335                     | 0.90                       | 0.88                       | /            |
| CKCS201610-4.7uH/M | 4.7±20%                   | 0.479                     | 0.70                       | 0.74                       | /            |
| CKCS201610-6.8uH/M | 6.8±20%                   | 0.816                     | 0.60                       | 0.52                       | /            |

CKCS252010

| PART NUMBER<br>品名  | INDUCTANCE<br>(uH)<br>电感值 | DCR (Max.)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 | Marker<br>印字 |
|--------------------|---------------------------|---------------------------|----------------------------|----------------------------|--------------|
| CKCS252010-1uH/N   | 1±30%                     | 0.108 Max.                | 1.85                       | 1.65                       | A            |
| CKCS252010-1.5uH/N | 1.5±30%                   | 0.182 Max.                | 1.80                       | 1.30                       | B            |
| CKCS252010-2.2uH/N | 2.2±30%                   | 0.209 Max.                | 1.20                       | 1.20                       | C            |
| CKCS252010-3.3uH/M | 3.3±20%                   | 0.328 Max.                | 1.05                       | 0.90                       | D            |
| CKCS252010-4.7uH/M | 4.7±20%                   | 0.563 Max.                | 0.95                       | 0.70                       | E            |
| CKCS252010-5.6uH/M | 5.6±20%                   | 0.563 Max.                | 0.80                       | 0.73                       | F            |
| CKCS252010-6.8uH/M | 6.8±20%                   | 0.896 Max.                | 0.78                       | 0.59                       | G            |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 1MHz,0.2Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. Absolute maximum voltage: DC 50V



**CKCS252012**

| PART NUMBER<br>品名       | INDUCTANCE<br>(uH)<br>电感值 | DCR (Max.)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 | Marker<br>印字 |
|-------------------------|---------------------------|---------------------------|----------------------------|----------------------------|--------------|
| CKCS252012-0.47uH/N-010 | 0.47±30%                  | 0.085                     | 3.82                       | 1.95                       | A            |
| CKCS252012-0.68uH/N-010 | 0.68±30%                  | 0.098                     | 3.28                       | 1.93                       | B            |
| CKCS252012-1uH/N        | 1±30%                     | 0.090                     | 2.59                       | 1.93                       | C            |
| CKCS252012-1.5uH/N      | 1.5±30%                   | 0.147                     | 2.24                       | 1.40                       | E            |
| CKCS252012-2.2uH/N      | 2.2±30%                   | 0.216                     | 1.85                       | 1.15                       | F            |
| CKCS252012-3.3uH/M      | 3.3±20%                   | 0.264                     | 1.61                       | 1.04                       | G            |
| CKCS252012-4.7uH/M      | 4.7±20%                   | 0.377                     | 1.12                       | 0.84                       | H            |
| CKCS252012-6.8uH/M      | 6.8±20%                   | 0.581                     | 0.98                       | 0.69                       | J            |
| CKCS252012-10uH/M       | 10±20%                    | 0.690                     | 0.79                       | 0.62                       | K            |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 1MHz,0.2Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^{\circ}\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. Absolute maximum voltage: DC 50V



### CKCS3012

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS3012-1uH/N    | 1±30%                     | 0.040                     | 1.87                       | 2.20                       |
| CKCS3012-1.5uH/N  | 1.5±30%                   | 0.045                     | 1.62                       | 2.01                       |
| CKCS3012-2.2uH/N  | 2.2±30%                   | 0.075                     | 1.20                       | 1.55                       |
| CKCS3012-3.3uH/M  | 3.3±20%                   | 0.100                     | 1.05                       | 1.36                       |
| CKCS3012-4.7uH/M  | 4.7±20%                   | 0.150                     | 0.90                       | 1.24                       |
| CKCS3012-6.8uH/M  | 6.8±20%                   | 0.190                     | 0.75                       | 0.98                       |
| CKCS3012-10uH/M   | 10±20%                    | 0.320                     | 0.60                       | 0.83                       |
| CKCS3012-15uH/M   | 15±20%                    | 0.360                     | 0.45                       | 0.71                       |
| CKCS3012-22uH/M   | 22±20%                    | 0.645                     | 0.42                       | 0.53                       |
| CKCS3012-33uH/M   | 33±20%                    | 0.875                     | 0.36                       | 0.46                       |
| CKCS3012-47uH/M   | 47±20%                    | 1.450                     | 0.27                       | 0.35                       |

### CKCS3015

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS3015-1uH/N    | 1±30%                     | 0.039                     | 2.32                       | 2.35                       |
| CKCS3015-1.5uH/N  | 1.5±30%                   | 0.050                     | 2.00                       | 1.70                       |
| CKCS3015-2.2uH/N  | 2.2±30%                   | 0.060                     | 1.60                       | 1.60                       |
| CKCS3015-3.3uH/M  | 3.3±20%                   | 0.080                     | 1.32                       | 1.36                       |
| CKCS3015-4.7uH/M  | 4.7±20%                   | 0.125                     | 1.10                       | 1.09                       |
| CKCS3015-6.8uH/M  | 6.8±20%                   | 0.200                     | 0.85                       | 0.85                       |
| CKCS3015-10uH/M   | 10±20%                    | 0.250                     | 0.72                       | 0.77                       |
| CKCS3015-15uH/M   | 15±20%                    | 0.350                     | 0.66                       | 0.65                       |
| CKCS3015-22uH/M   | 22±20%                    | 0.460                     | 0.52                       | 0.57                       |
| CKCS3015-33uH/M   | 33±20%                    | 0.820                     | 0.44                       | 0.43                       |
| CKCS3015-47uH/M   | 47±20%                    | 1.250                     | 0.35                       | 0.35                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. Absolute maximum voltage: DC 50V



**CKCS4018**

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS4018-0.47uH/N | 0.47±30%                  | 0.023                     | 4.30                       | 2.50                       |
| CKCS4018-1uH/N    | 1±30%                     | 0.025                     | 4.20                       | 2.00                       |
| CKCS4018-1.5uH/N  | 1.5±30%                   | 0.030                     | 3.35                       | 1.80                       |
| CKCS4018-2.2uH/N  | 2.2±30%                   | 0.045                     | 2.70                       | 1.65                       |
| CKCS4018-3.3uH/M  | 3.3±20%                   | 0.070                     | 2.45                       | 1.23                       |
| CKCS4018-4.7uH/M  | 4.7±20%                   | 0.090                     | 1.70                       | 1.20                       |
| CKCS4018-6.8uH/M  | 6.8±20%                   | 0.110                     | 1.45                       | 1.06                       |
| CKCS4018-10uH/M   | 10±20%                    | 0.180                     | 1.30                       | 0.84                       |
| CKCS4018-15uH/M   | 15±20%                    | 0.250                     | 0.94                       | 0.65                       |
| CKCS4018-22uH/M   | 22±20%                    | 0.360                     | 0.80                       | 0.59                       |
| CKCS4018-33uH/M   | 33±20%                    | 0.530                     | 0.56                       | 0.49                       |
| CKCS4018-47uH/M   | 47±20%                    | 0.650                     | 0.57                       | 0.42                       |
| CKCS4018-68uH/M   | 68±20%                    | 1.000                     | 0.47                       | 0.32                       |
| CKCS4018-100uH/M  | 100±20%                   | 1.750                     | 0.40                       | 0.25                       |
| CKCS4018-150uH/M  | 150±20%                   | 2.500                     | 0.30                       | 0.22                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. CKCS4018-100uH~150uH Absolute maximum voltage: DC 50V



### CKCS4020

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR ( $\pm 30\%$ )<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|--|----------------------------|----------------------------|
| CKCS4020-1uH/N    | 1 $\pm 30\%$              | 0.029                                      | 4.78                       | 2.15                       |
| CKCS4020-1.5uH/N  | 1.5 $\pm 30\%$            | 0.035                                      | 4.45                       | 1.98                       |
| CKCS4020-2.2uH/N  | 2.2 $\pm 30\%$            | 0.040                                      | 3.40                       | 1.85                       |
| CKCS4020-3.3uH/M  | 3.3 $\pm 20\%$            | 0.070                                      | 3.20                       | 1.40                       |
| CKCS4020-4.7uH/M  | 4.7 $\pm 20\%$            | 0.075                                      | 2.35                       | 1.34                       |
| CKCS4020-6.8uH/M  | 6.8 $\pm 20\%$            | 0.125                                      | 2.00                       | 1.04                       |
| CKCS4020-10uH/M   | 10 $\pm 20\%$             | 0.165                                      | 1.60                       | 0.90                       |
| CKCS4020-15uH/M   | 15 $\pm 20\%$             | 0.230                                      | 1.35                       | 0.77                       |
| CKCS4020-22uH/M   | 22 $\pm 20\%$             | 0.350                                      | 1.05                       | 0.62                       |
| CKCS4020-33uH/M   | 33 $\pm 20\%$             | 0.550                                      | 0.85                       | 0.49                       |
| CKCS4020-47uH/M   | 47 $\pm 20\%$             | 0.710                                      | 0.74                       | 0.44                       |
| CKCS4020-56uH/M   | 56 $\pm 20\%$             | 0.800                                      | 0.66                       | 0.41                       |
| CKCS4020-68uH/M   | 68 $\pm 20\%$             | 1.060                                      | 0.61                       | 0.36                       |
| CKCS4020-82uH/M   | 82 $\pm 20\%$             | 1.170                                      | 0.50                       | 0.34                       |
| CKCS4020-100uH/M  | 100 $\pm 20\%$            | 1.550                                      | 0.48                       | 0.31                       |
| CKCS4020-150uH/M  | 150 $\pm 20\%$            | 2.800                                      | 0.40                       | 0.25                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature :  $-40^\circ\text{C} \sim +125^\circ\text{C}$  (Including self - temperature rise)

6. CKCS4020-100uH~150uH Absolute maximum voltage: DC 50V



**CKCS4030**

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS4030-1uH/N    | 1±30%                     | 0.016                     | 5.26                       | 4.14                       |
| CKCS4030-1.5uH/N  | 1.5±30%                   | 0.025                     | 4.84                       | 3.34                       |
| CKCS4030-2.2uH/N  | 2.2±30%                   | 0.030                     | 4.40                       | 2.95                       |
| CKCS4030-3.3uH/M  | 3.3±20%                   | 0.040                     | 3.30                       | 2.40                       |
| CKCS4030-4.7uH/M  | 4.7±20%                   | 0.060                     | 2.90                       | 2.00                       |
| CKCS4030-6.8uH/M  | 6.8±20%                   | 0.090                     | 2.75                       | 1.60                       |
| CKCS4030-10uH/M   | 10±20%                    | 0.120                     | 1.95                       | 1.50                       |
| CKCS4030-15uH/M   | 15±20%                    | 0.190                     | 1.65                       | 1.11                       |
| CKCS4030-22uH/M   | 22±20%                    | 0.225                     | 1.30                       | 1.00                       |
| CKCS4030-33uH/M   | 33±20%                    | 0.330                     | 1.10                       | 0.84                       |
| CKCS4030-47uH/M   | 47±20%                    | 0.445                     | 0.95                       | 0.72                       |
| CKCS4030-68uH/M   | 68±20%                    | 0.868                     | 0.72                       | 0.52                       |
| CKCS4030-100uH/M  | 100±20%                   | 1.150                     | 0.60                       | 0.45                       |
| CKCS4030-120uH/M  | 120±20%                   | 1.300                     | 0.53                       | 0.42                       |
| CKCS4030-150uH/M  | 150±20%                   | 1.800                     | 0.50                       | 0.39                       |
| CKCS4030-180uH/M  | 180±20%                   | 2.200                     | 0.45                       | 0.38                       |
| CKCS4030-220uH/M  | 220±20%                   | 2.500                     | 0.40                       | 0.35                       |
| CKCS4030-330uH/M  | 330±20%                   | 4.000                     | 0.30                       | 0.25                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C (Including self - temperature rise)

6. CKCS4030-150uH~330uH Absolute maximum voltage: DC 50V



电阻可以定为:  $100\text{m}\Omega \pm 30\%$ , 实测值: 112, 111, 113, 116, 1150m $\Omega$



### CKCS5020

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR ( $\pm 30\%$ )<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|--|----------------------------|----------------------------|
| CKCS5020-0.47uH/N | 0.47 $\pm 30\%$           | 0.013                                      | 6.20                       | 4.60                       |
| CKCS5020-1uH/N    | 1 $\pm 30\%$              | 0.020                                      | 4.10                       | 3.80                       |
| CKCS5020-1.5uH/N  | 1.5 $\pm 30\%$            | 0.030                                      | 4.10                       | 3.20                       |
| CKCS5020-2.2uH/N  | 2.2 $\pm 30\%$            | 0.032                                      | 3.20                       | 2.70                       |
| CKCS5020-3.3uH/M  | 3.3 $\pm 20\%$            | 0.050                                      | 2.55                       | 2.30                       |
| CKCS5020-4.7uH/M  | 4.7 $\pm 20\%$            | 0.057                                      | 2.50                       | 2.20                       |
| CKCS5020-6.8uH/M  | 6.8 $\pm 20\%$            | 0.083                                      | 2.05                       | 1.80                       |
| CKCS5020-10uH/M   | 10 $\pm 20\%$             | 0.120                                      | 1.70                       | 1.55                       |
| CKCS5020-15uH/M   | 15 $\pm 20\%$             | 0.165                                      | 1.35                       | 1.25                       |
| CKCS5020-22uH/M   | 22 $\pm 20\%$             | 0.250                                      | 1.15                       | 1.10                       |
| CKCS5020-33uH/M   | 33 $\pm 20\%$             | 0.400                                      | 0.92                       | 0.90                       |
| CKCS5020-47uH/M   | 47 $\pm 20\%$             | 0.580                                      | 0.77                       | 0.75                       |
| CKCS5020-68uH/M   | 68 $\pm 20\%$             | 0.740                                      | 0.65                       | 0.64                       |
| CKCS5020-100uH/M  | 100 $\pm 20\%$            | 1.100                                      | 0.53                       | 0.53                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C (Including self - temperature rise)



### CKCS5040

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS5040-1uH/N    | 1±30%                     | 0.012                     | 7.35                       | 4.90                       |
| CKCS5040-1.2uH/N  | 1.2±30%                   | 0.016                     | 6.50                       | 4.15                       |
| CKCS5040-1.5uH/N  | 1.5±30%                   | 0.018                     | 6.30                       | 4.00                       |
| CKCS5040-2.2uH/N  | 2.2±30%                   | 0.019                     | 4.90                       | 3.80                       |
| CKCS5040-3.3uH/M  | 3.3±20%                   | 0.024                     | 3.95                       | 3.40                       |
| CKCS5040-4.7uH/M  | 4.7±20%                   | 0.032                     | 3.50                       | 3.00                       |
| CKCS5040-6.8uH/M  | 6.8±20%                   | 0.043                     | 2.90                       | 2.50                       |
| CKCS5040-10uH/M   | 10±20%                    | 0.064                     | 2.35                       | 2.10                       |
| CKCS5040-15uH/M   | 15±20%                    | 0.086                     | 2.00                       | 2.00                       |
| CKCS5040-22uH/M   | 22±20%                    | 0.129                     | 1.60                       | 1.50                       |
| CKCS5040-33uH/M   | 33±20%                    | 0.188                     | 1.30                       | 1.20                       |
| CKCS5040-47uH/M   | 47±20%                    | 0.272                     | 1.10                       | 1.00                       |
| CKCS5040-68uH/M   | 68±20%                    | 0.400                     | 0.90                       | 0.80                       |
| CKCS5040-100uH/M  | 100±20%                   | 0.560                     | 0.75                       | 0.70                       |
| CKCS5040-150uH/M  | 150±20%                   | 0.750                     | 0.65                       | 0.60                       |
| CKCS5040-180uH/M  | 180±20%                   | 1.200                     | 0.60                       | 0.48                       |
| CKCS5040-220uH/M  | 220±20%                   | 1.280                     | 0.48                       | 0.40                       |
| CKCS5040-330uH/M  | 330±20%                   | 2.100                     | 0.42                       | 0.36                       |
| CKCS5040-470uH/M  | 470±20%                   | 3.000                     | 0.37                       | 0.35                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz,1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^{\circ}\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. CKCS5040-330uH~470uH Absolute maximum voltage: DC 100V

从实测值判定，电阻可以做到 $0.06\Omega\pm 30\%$



### CKCS6020

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS6020-1uH/N    | 1±30%                     | 0.020                     | 4.15                       | 3.50                       |
| CKCS6020-1.5uH/N  | 1.5±30%                   | 0.022                     | 4.25                       | 3.20                       |
| CKCS6020-2.2uH/N  | 2.2±30%                   | 0.028                     | 3.75                       | 2.75                       |
| CKCS6020-3.3uH/M  | 3.3±20%                   | 0.035                     | 3.15                       | 2.60                       |
| CKCS6020-4.7uH/M  | 4.7±20%                   | 0.058                     | 3.00                       | 2.00                       |
| CKCS6020-6.8uH/M  | 6.8±20%                   | 0.079                     | 2.20                       | 1.80                       |
| CKCS6020-10uH/M   | 10±20%                    | 0.105                     | 1.75                       | 1.40                       |
| CKCS6020-15uH/M   | 15±20%                    | 0.145                     | 1.20                       | 1.20                       |
| CKCS6020-18uH/M   | 18±20%                    | 0.180                     | 1.20                       | 1.08                       |
| CKCS6020-22uH/M   | 22±20%                    | 0.204                     | 1.05                       | 1.00                       |
| CKCS6020-33uH/M   | 33±20%                    | 0.300                     | 0.95                       | 0.84                       |
| CKCS6020-47uH/M   | 47±20%                    | 0.430                     | 0.70                       | 0.80                       |
| CKCS6020-100uH/M  | 100±20%                   | 1.100                     | 0.40                       | 0.40                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)



### CKCS6028

| PART NUMBER<br>品名 | INDUCTANCE<br>(uH)<br>电感值 | DCR (±30%)<br>(Ω)<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------------|
| CKCS6028-1uH/N    | 1±30%                     | 0.013                     | 5.75                       | 5.20                       |
| CKCS6028-1.5uH/N  | 1.5±30%                   | 0.015                     | 6.00                       | 4.58                       |
| CKCS6028-2.2uH/N  | 2.2±30%                   | 0.02                      | 5.10                       | 3.75                       |
| CKCS6028-3.3uH/M  | 3.3±20%                   | 0.025                     | 4.15                       | 3.48                       |
| CKCS6028-4.7uH/M  | 4.7±20%                   | 0.03                      | 3.00                       | 3.08                       |
| CKCS6028-6.8uH/M  | 6.8±20%                   | 0.047                     | 2.60                       | 2.40                       |
| CKCS6028-10uH/M   | 10±20%                    | 0.072                     | 2.04                       | 1.95                       |
| CKCS6028-15uH/M   | 15±20%                    | 0.125                     | 1.75                       | 1.45                       |
| CKCS6028-18uH/M   | 18±20%                    | 0.12                      | 1.52                       | 1.45                       |
| CKCS6028-22uH/M   | 22±20%                    | 0.14                      | 1.45                       | 1.40                       |
| CKCS6028-33uH/M   | 33±20%                    | 0.185                     | 1.35                       | 1.22                       |
| CKCS6028-47uH/M   | 47±20%                    | 0.315                     | 1.15                       | 1.06                       |
| CKCS6028-68uH/M   | 68±20%                    | 0.36                      | 0.80                       | 0.86                       |
| CKCS6028-82uH/M   | 82±20%                    | 0.50                      | 0.80                       | 0.70                       |
| CKCS6028-100uH/M  | 100±20%                   | 0.50                      | 0.65                       | 0.70                       |
| CKCS6028-150uH/M  | 150±20%                   | 1.00                      | 0.50                       | 0.50                       |
| CKCS6028-220uH/M  | 220±20%                   | 1.25                      | 0.45                       | 0.45                       |
| CKCS6028-330uH/M  | 330±20%                   | 1.90                      | 0.35                       | 0.38                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C (Including self - temperature rise)



### CKCS6045

| PART NUMBER<br>品名 | INDUCTANCE<br>( $\mu$ H)<br>电感值 | DCR ( $\pm$ 30%)<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------------|--|----------------------------|----------------------------|
| CKCS6045-1uH/N    | 1 $\pm$ 30%                     | 0.011                                    | 9.85                       | 5.14                       |
| CKCS6045-1.5uH/N  | 1.5 $\pm$ 30%                   | 0.012                                    | 8.80                       | 4.95                       |
| CKCS6045-2.2uH/N  | 2.2 $\pm$ 30%                   | 0.014                                    | 6.75                       | 4.60                       |
| CKCS6045-3.3uH/M  | 3.3 $\pm$ 20%                   | 0.024                                    | 5.90                       | 3.70                       |
| CKCS6045-4.7uH/M  | 4.7 $\pm$ 20%                   | 0.031                                    | 4.97                       | 3.30                       |
| CKCS6045-6.8uH/M  | 6.8 $\pm$ 20%                   | 0.035                                    | 3.90                       | 3.00                       |
| CKCS6045-10uH/M   | 10 $\pm$ 20%                    | 0.048                                    | 3.20                       | 2.45                       |
| CKCS6045-15uH/M   | 15 $\pm$ 20%                    | 0.068                                    | 2.50                       | 2.05                       |
| CKCS6045-22uH/M   | 22 $\pm$ 20%                    | 0.089                                    | 2.05                       | 1.80                       |
| CKCS6045-33uH/M   | 33 $\pm$ 20%                    | 0.137                                    | 1.65                       | 1.45                       |
| CKCS6045-47uH/M   | 47 $\pm$ 20%                    | 0.200                                    | 1.40                       | 1.20                       |
| CKCS6045-68uH/M   | 68 $\pm$ 20%                    | 0.289                                    | 1.20                       | 1.00                       |
| CKCS6045-82uH/M   | 82 $\pm$ 20%                    | 0.400                                    | 1.05                       | 0.90                       |
| CKCS6045-100uH/M  | 100 $\pm$ 20%                   | 0.433                                    | 0.95                       | 0.80                       |
| CKCS6045-120uH/M  | 120 $\pm$ 20%                   | 0.484                                    | 0.85                       | 0.77                       |
| CKCS6045-150uH/M  | 150 $\pm$ 20%                   | 0.580                                    | 0.80                       | 0.70                       |
| CKCS6045-220uH/M  | 220 $\pm$ 20%                   | 0.834                                    | 0.70                       | 0.59                       |
| CKCS6045-330uH/M  | 330 $\pm$ 20%                   | 1.270                                    | 0.57                       | 0.57                       |
| CKCS6045-470uH/M  | 470 $\pm$ 20%                   | 1.800                                    | 0.50                       | 0.42                       |
| CKCS6045-680uH/M  | 680 $\pm$ 20%                   | 2.500                                    | 0.42                       | 0.33                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz,1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. CKCS6045-470uH~680uH Absolute maximum voltage: DC 100V



### CKCS8040

| PART NUMBER<br>品名 | INDUCTANCE<br>( $\mu$ H)<br>电感值 | DCR ( $\pm$ 30%)<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------------|--|----------------------------|----------------------------|
| CKCS8040-1uH/N    | 1 $\pm$ 30%                     | 0.008                                    | 9.85                       | 6.30                       |
| CKCS8040-1.5uH/N  | 1.5 $\pm$ 30%                   | 0.010                                    | 8.15                       | 5.65                       |
| CKCS8040-2.2uH/N  | 2.2 $\pm$ 30%                   | 0.012                                    | 7.10                       | 5.15                       |
| CKCS8040-3.3uH/M  | 3.3 $\pm$ 20%                   | 0.017                                    | 6.50                       | 4.40                       |
| CKCS8040-4.7uH/M  | 4.7 $\pm$ 20%                   | 0.019                                    | 5.90                       | 4.10                       |
| CKCS8040-6.8uH/M  | 6.8 $\pm$ 20%                   | 0.024                                    | 4.55                       | 3.60                       |
| CKCS8040-8.2uH/M  | 8.2 $\pm$ 20%                   | 0.026                                    | 4.20                       | 3.45                       |
| CKCS8040-10uH/M   | 10 $\pm$ 20%                    | 0.042                                    | 3.60                       | 3.30                       |
| CKCS8040-15uH/M   | 15 $\pm$ 20%                    | 0.047                                    | 2.95                       | 2.60                       |
| CKCS8040-22uH/M   | 22 $\pm$ 20%                    | 0.069                                    | 2.40                       | 2.10                       |
| CKCS8040-33uH/M   | 33 $\pm$ 20%                    | 0.097                                    | 2.05                       | 1.80                       |
| CKCS8040-47uH/M   | 47 $\pm$ 20%                    | 0.136                                    | 1.75                       | 1.55                       |
| CKCS8040-56uH/M   | 56 $\pm$ 20%                    | 0.180                                    | 1.55                       | 1.30                       |
| CKCS8040-68uH/M   | 68 $\pm$ 20%                    | 0.196                                    | 1.45                       | 1.25                       |
| CKCS8040-82uH/M   | 82 $\pm$ 20%                    | 0.225                                    | 1.30                       | 1.15                       |
| CKCS8040-100uH/M  | 100 $\pm$ 20%                   | 0.290                                    | 1.15                       | 1.00                       |
| CKCS8040-120uH/M  | 120 $\pm$ 20%                   | 0.334                                    | 1.12                       | 0.95                       |
| CKCS8040-150uH/M  | 150 $\pm$ 20%                   | 0.410                                    | 1.00                       | 0.85                       |
| CKCS8040-220uH/M  | 220 $\pm$ 20%                   | 0.650                                    | 0.85                       | 0.80                       |
| CKCS8040-330uH/M  | 330 $\pm$ 20%                   | 0.889                                    | 0.68                       | 0.64                       |
| CKCS8040-470uH/M  | 470 $\pm$ 20%                   | 1.260                                    | 0.60                       | 0.54                       |
| CKCS8040-680uH/M  | 680 $\pm$ 20%                   | 2.000                                    | 0.50                       | 0.45                       |

**Remark:** 1. All test data is reference to 25°C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^\circ\text{C}$ ) from 25°C ambient.

5. Operating Temperature : -40°C ~ +125°C(Including self - temperature rise)

6. CKCS8040-470uH~680uH Absolute maximum voltage: DC 100V



2023/2/16 电阻由 $2.5\Omega$ 改为 $2\Omega\pm 30\%$



### CKCS8060

| PART NUMBER<br>品名 | INDUCTANCE<br>( $\mu$ H)<br>电感值 | DCR ( $\pm$ 30%)<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------------|--|----------------------------|----------------------------|
| CKCS8060-10uH/M   | 10 $\pm$ 20%                    | 0.035                                    | 5.00                       | 3.20                       |
| CKCS8060-22uH/M   | 22 $\pm$ 20%                    | 0.06                                     | 3.00                       | 2.80                       |
| CKCS8060-33uH/M   | 33 $\pm$ 20%                    | 0.09                                     | 2.50                       | 2.10                       |
| CKCS8060-47uH/M   | 47 $\pm$ 20%                    | 0.125                                    | 1.85                       | 1.60                       |
| CKCS8060-82uH/M   | 82 $\pm$ 20%                    | 0.23                                     | 1.30                       | 1.20                       |
| CKCS8060-100uH/M  | 100 $\pm$ 20%                   | 0.25                                     | 1.20                       | 0.91                       |
| CKCS8060-150uH/M  | 150 $\pm$ 20%                   | 0.35                                     | 1.15                       | 0.90                       |
| CKCS8060-220uH/M  | 220 $\pm$ 20%                   | 0.58                                     | 1.10                       | 0.88                       |
| CKCS8060-330uH/M  | 330 $\pm$ 20%                   | 0.80                                     | 0.90                       | 0.65                       |
| CKCS8060-470uH/M  | 470 $\pm$ 20%                   | 1.30                                     | 0.80                       | 0.55                       |
| CKCS8060-680uH/M  | 680 $\pm$ 20%                   | 1.60                                     | 0.70                       | 0.48                       |

### CKCS8080

| PART NUMBER<br>品名 | INDUCTANCE<br>( $\mu$ H)<br>电感值 | DCR ( $\pm$ 30%)<br>( $\Omega$ )<br>直流电阻 | Isat (Max.)<br>(A)<br>饱和电流 | Irms (Max.)<br>(A)<br>温升电流 |
|-------------------|---------------------------------|--|----------------------------|----------------------------|
| CKCS8080-10uH/M   | 10 $\pm$ 20%                    | 0.035                                    | 6.00                       | 3.50                       |
| CKCS8080-15uH/M   | 15 $\pm$ 20%                    | 0.045                                    | 4.50                       | 3.00                       |
| CKCS8080-22uH/M   | 22 $\pm$ 20%                    | 0.055                                    | 4.00                       | 3.00                       |
| CKCS8080-33uH/M   | 33 $\pm$ 20%                    | 0.075                                    | 3.00                       | 2.50                       |
| CKCS8080-82uH/M   | 82 $\pm$ 20%                    | 0.150                                    | 2.20                       | 1.50                       |
| CKCS8080-100uH/M  | 100 $\pm$ 20%                   | 0.19                                     | 1.90                       | 1.12                       |
| CKCS8080-150uH/M  | 150 $\pm$ 20%                   | 0.30                                     | 1.60                       | 1.00                       |
| CKCS8080-220uH/M  | 220 $\pm$ 20%                   | 0.42                                     | 1.20                       | 0.80                       |

**Remark:** 1. All test data is reference to 25 $^{\circ}$ C ambient.

2. Inductance Tested at 100kHz, 1Vrms

3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

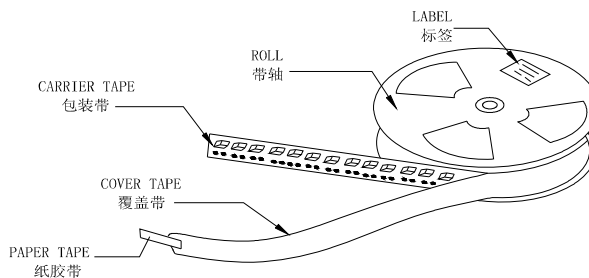
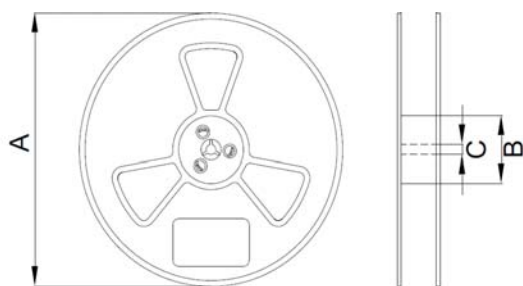
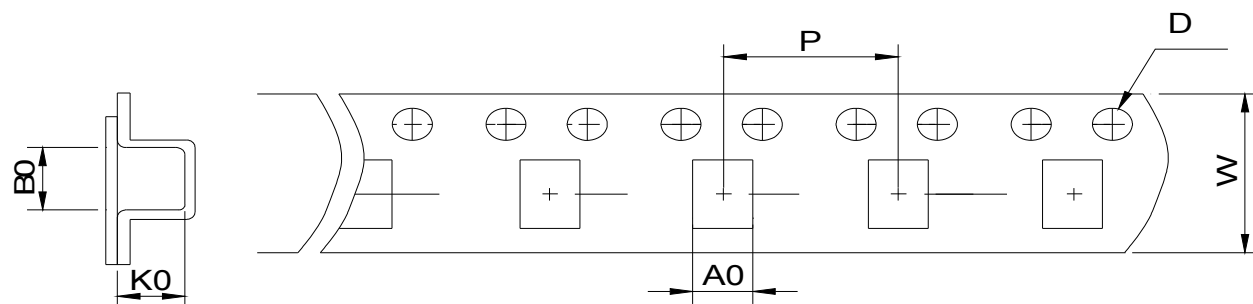
4. Irms: DC current that causes the temperature rise ( $\Delta T \leq 40^{\circ}C$ ) from 25 $^{\circ}$ C ambient.

5. Operating Temperature : -40 $^{\circ}$ C ~ +125 $^{\circ}$ C(Including self - temperature rise)

6. CKCS8060-470uH~680uH Absolute maximum voltage: DC 100V



● **PACKAGING SPECIFICATION 包装规格**



| TYPE(型号)   | Tape Dimension 载带尺寸(mm) |      |      |      |     |    | Reel Dimension 卷盘尺寸 (mm) |     |    | Quantity (Pcs/Reel) 数量 (个/卷) |
|------------|-------------------------|------|------|------|-----|----|--------------------------|-----|----|------------------------------|
|            | W                       | A0   | B0   | K0   | D   | P  | A                        | B   | C  |                              |
| CKCS201610 | 8                       | 1.9  | 2.2  | 1.2  | 1.5 | 4  | 178                      | 58  | 13 | 2000                         |
| CKCS252010 | 8                       | 2.4  | 2.8  | 1.3  | 1.5 | 4  | 178                      | 58  | 13 | 2000                         |
| CKCS252012 | 8                       | 2.45 | 2.75 | 1.55 | 1.5 | 4  | 178                      | 58  | 13 | 2000                         |
| CKCS3012   | 8                       | 3.3  | 3.3  | 1.6  | 1.5 | 4  | 178                      | 58  | 13 | 2000                         |
| CKCS3015   | 8                       | 3.3  | 3.3  | 1.85 | 1.5 | 4  | 178                      | 58  | 13 | 2000                         |
| CKCS4018   | 12                      | 4.3  | 4.3  | 2    | 1.5 | 8  | 330                      | 100 | 13 | 3000                         |
| CKCS4020   | 12                      | 4.3  | 4.3  | 2.2  | 1.5 | 8  | 330                      | 100 | 13 | 3000                         |
| CKCS4030   | 12                      | 4.3  | 4.3  | 3.2  | 1.5 | 8  | 330                      | 100 | 13 | 2000                         |
| CKCS5020   | 12                      | 5.3  | 5.3  | 2.3  | 1.5 | 8  | 330                      | 100 | 13 | 3000                         |
| CKCS5040   | 12                      | 5.3  | 5.3  | 4.2  | 1.5 | 8  | 330                      | 100 | 13 | 1500                         |
| CKCS6020   | 16                      | 6.4  | 6.4  | 2.2  | 1.5 | 8  | 330                      | 100 | 13 | 2500                         |
| CKCS6028   | 16                      | 6.4  | 6.4  | 3.1  | 1.5 | 8  | 330                      | 100 | 13 | 2000                         |
| CKCS6045   | 16                      | 6.4  | 6.4  | 4.75 | 1.5 | 8  | 330                      | 100 | 13 | 1500                         |
| CKCS8040   | 16                      | 8.4  | 8.4  | 4.2  | 1.5 | 12 | 330                      | 100 | 13 | 1000                         |
| CKCS8060   | 16                      | 8.4  | 8.4  | 6.5  | 1.5 | 12 | 330                      | 100 | 13 | 800                          |
| CKCS8080   | 16                      | 8.4  | 8.4  | 8.2  | 1.5 | 12 | 330                      | 100 | 13 | 500                          |

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