

Applications

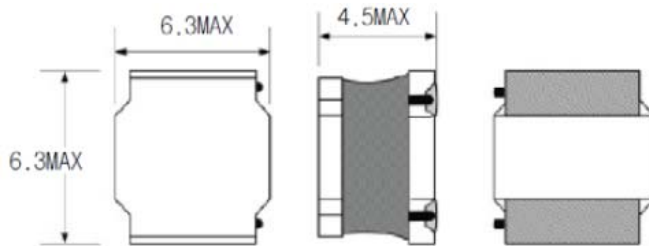
- Automotive Electronics
- LED Drive Module
- Buck, Boost & Forward Converter Etc.
- Noise Filtering Chokes

Picture

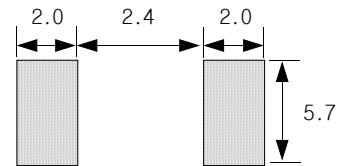
Environmental data

- Operating temperature range : -40°C to +125°C (Including self-temperature rise)
- Storage temperature range : -40°C to +125°C

Dimensions [Unit : mm]



Land Pattern [Unit : mm]



Specifications

| Part No.① | L(uH)② | DC Resistance(mΩ)③ | | I _{sat} (A)④ | I _{rms} (A)⑤ |
|---------------|--------|--------------------|-----|-----------------------|-----------------------|
| | | TYP | MAX | TYP | TYP |
| KOU6045S-R68N | 0.68 | | 8 | 9.50 | 5.70 |
| KOU6045S-1R0N | 1.0 | | 14 | 9.00 | 5.14 |
| KOU6045S-1R5N | 1.5 | | 16 | 7.50 | 4.95 |
| KOU6045S-2R2N | 2.2 | | 22 | 6.50 | 4.60 |
| KOU6045S-3R3N | 3.3 | | 26 | 5.30 | 3.70 |
| KOU6045S-3R6N | 3.6 | | 27 | 5.00 | 3.70 |
| KOU6045S-4R2N | 4.2 | | 28 | 4.90 | 3.50 |
| KOU6045S-4R7N | 4.7 | | 34 | 4.50 | 3.30 |
| KOU6045S-5R6N | 5.6 | | 40 | 3.70 | 3.15 |
| KOU6045S-6R0M | 6.0 | | 42 | 3.50 | 3.00 |
| KOU6045S-6R3M | 6.3 | | 43 | 3.30 | 3.00 |
| KOU6045S-6R8M | 6.8 | | 45 | 3.20 | 2.90 |
| KOU6045S-7R5M | 7.5 | | 48 | 3.10 | 2.60 |
| KOU6045S-8R2M | 8.2 | | 56 | 3.00 | 2.45 |
| KOU6045S-100M | 10.0 | | 67 | 2.80 | 2.20 |
| KOU6045S-120M | 12.0 | | 75 | 2.50 | 2.05 |
| KOU6045S-150M | 15.0 | | 100 | 2.20 | 1.85 |
| KOU6045S-180M | 18.0 | | 122 | 2.00 | 1.80 |
| KOU6045S-220M | 22.0 | | 149 | 1.90 | 1.65 |
| KOU6045S-270M | 27.0 | | 165 | 1.65 | 1.45 |
| KOU6045S-330M | 33.0 | | 195 | 1.40 | 1.20 |
| KOU6045S-470M | 47.0 | | 286 | 1.30 | 1.10 |
| KOU6045S-680M | 68.0 | | 338 | 1.20 | 1.00 |
| KOU6045S-820M | 82.0 | | 377 | 1.05 | 0.90 |

Remarks

1. Inductance Tolerance : N → 30%, M → 20%
2. Test frequency : at 100KHz, 1.0Vrms
3. DC resistance : Reference ambient temperature 25°C
4. I_{sat} : Maximum allowable DC current is that which causes a 30% inductance reduction from the initial value (Reference ambient temperature 25°C)
5. I_{rms} : DC current for an approximate temperature rise of 40 °C without core loss.
Temperature rise is highly dependent on many factors including P.C.B land pattern, trace size, and proximity to other components.
Therefore temperature rise should be verified in application conditions.
6. Quantity/reel : 1,500 PCS

