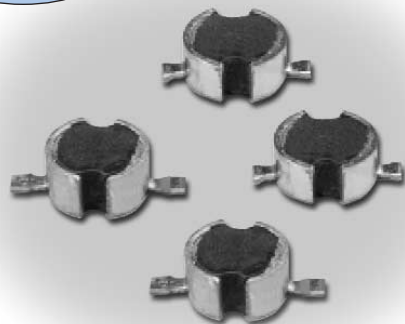


NEW

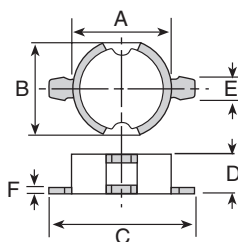


features

- Small size and low profile. Designed to a compact and thin shape requiring the least installation space, suitable for small sized portable equipment.
- High inductance. The unique wire-winding structure achieves high inductance and low resistance and makes this product suitable for high output performance and high efficiency circuits.
- Suitable for reflow soldering
- Products with lead-free terminations meet RoHS requirements

Inductors

dimensions and construction



| Size | Dimensions inches (mm) | | | | | |
|--------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|
| | A | B | C | D | E | F |
| KE4513 | .122±.008 (3.1±0.2) | .122±.008 (3.1±0.2) | .177±.008 (4.5±0.2) | .051±.004 (1.3±0.1) | .029±.004 (0.74±0.1) | .008±.031 (0.2±0.8) |
| KE5315 | .122±.008 (3.1±0.2) | .122±.008 (3.1±0.2) | .209±.008 (5.3±0.2) | .059±.004 (1.5±0.1) | .029±.004 (0.74±0.1) | .008±.031 (0.2±0.8) |

NEW
ordering information

| | | | | | | |
|------------|-----------|--------------|---------------------------|------------|------------------------|--------------------|
| New Part # | KE | 4513 | C | TE | 122 | K |
| | Type | Size | Terminal Surface Material | Packaging | Nominal Inductance | Tolerance |
| | | 4513 5315 | C: SnCu | TE: Taping | 3 digits (unit: µH) | K: ±10% M: ±20% |

applications and ratings

| Type | Nominal Inductance (mH)* | Inductance Tolerance | DC Resistance Maximum (Ω)** | Allowable DC Current Maximum (mA)*** | Self Resonant Frequency Typical (MHz) | Operating Temperature Range | |
|---------------|--------------------------|----------------------|--------------------------------------|--------------------------------------|---------------------------------------|-----------------------------|----------------|
| KE4513CTE821K | 0.82 | K:±10% | 21±15% | 40 | 4.0 | -20°C to +85°C | |
| KE4513CTE122K | 1.2 | | 30±15% | 35 | 3.0 | | |
| KE4513CTE202K | 2 | | 52±15% | 25 | 2.5 | | |
| KE4513CTE302K | 3 | | 81±15% | 20 | 2.0 | | |
| KE4513CTE402K | 4 | | 107±15% | 15 | 1.5 | | |
| KE4513CTE143M | 14 | M:±20% | 120±10% | 1.7 | 1.0 | | -20°C to +85°C |
| KE4513CTE203M | 20 | | 170±10% | 1.4 | 0.9 | | |
| KE4513CTE233M | 23 | | 190±10% | 1.4 | 0.8 | | |
| KE4513CTE283M | 28 | | 280±10% | 0.9 | 0.7 | | |
| KE5315CTE821K | 0.82 | K:±10% | 21±15% | 40 | 3.6 | | |
| KE5315CTE102K | 1 | | 35±15% | 35 | 3.2 | | |
| KE5315CTE122K | 1.2 | | 30±15% | 35 | 3.1 | | |
| KE5315CTE152K | 1.5 | | 34±15% | 29 | 2.5 | | |
| KE5315CTE212K | 2.1 | | 50±15% | 20 | 2.3 | | |
| KE5315CTE222K | 2.2 | | 55±15% | 24 | 2.3 | | |
| KE5315CTE332K | 3.3 | | 82±15% | 15 | 1.5 | | |
| KE5315CTE402K | 4 | | 103±15% | 15 | 1.5 | | |
| KE5315CTE752K | 7.5 | 185±15% | 10 | 1.0 | | | |
| KE5315CTE902K | 9 | 85±15% | 3 | 1.2 | M:±20% | | |
| KE5315CTE143M | 14 | 120±10% | 1.7 | 1.0 | | | |
| KE5315CTE203M | 20 | 170±10% | 1.4 | 0.6 | | | |
| KE5315CTE233M | 23 | 190±10% | 1.4 | 0.8 | | | |
| KE5315CTE303M | 30 | | 280±10% | 0.9 | 0.5 | | |

* Condition: 1kHz, 1mA, 25°C

** Condition: 25°C

*** Allowable DC current is a DC bias current value which causes initial inductance to decrease by 30%

environmental applications

Performance Characteristics

| Parameter | Maximum ΔL | Test Method |
|------------------------------|--|---|
| Resistance to Soldering Heat | No significant abnormality in appearance | 280°C ± 5°C, 10s, Only terminal shall be immersed |
| Thermal Shock | No significant abnormality in appearance | -20°C (0.5h)/ +85°C (0.5h) 100 cycles |
| Low Temperature Exposure | No significant abnormality in appearance | -20°C ± 2°C, 1000h |
| Moisture Exposure | No significant abnormality in appearance | 60°C ± 2°C, 90%~95%RH, 1000h |
| Heat Resistance Load Life | No significant abnormality in appearance | 85°C, 1000h, Rated current x 100% |
| Resistance to Solvent | No damage and marking shall remain legible | JIS C0052 Accordance with JIS C0052 |