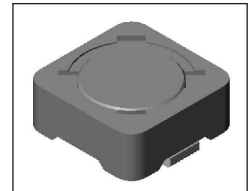


# SMT Power Inductor

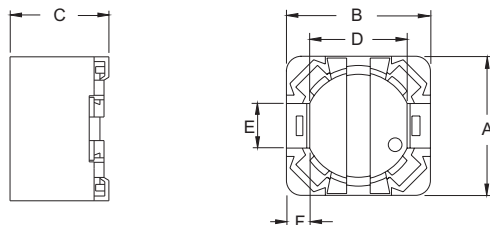
## SIQ73 Type

### Features

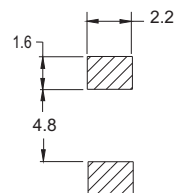
- RoHS compliant.
- Magnetically shielded.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.



### Mechanical Dimension:



### RECOMMENDED PAD PATTERNS



UNIT:mm/inch

A = 7.3±0.2 / 0.287±0.008

B = 7.3±0.2 / 0.287±0.008

C = 3.4 / 0.134 Max.

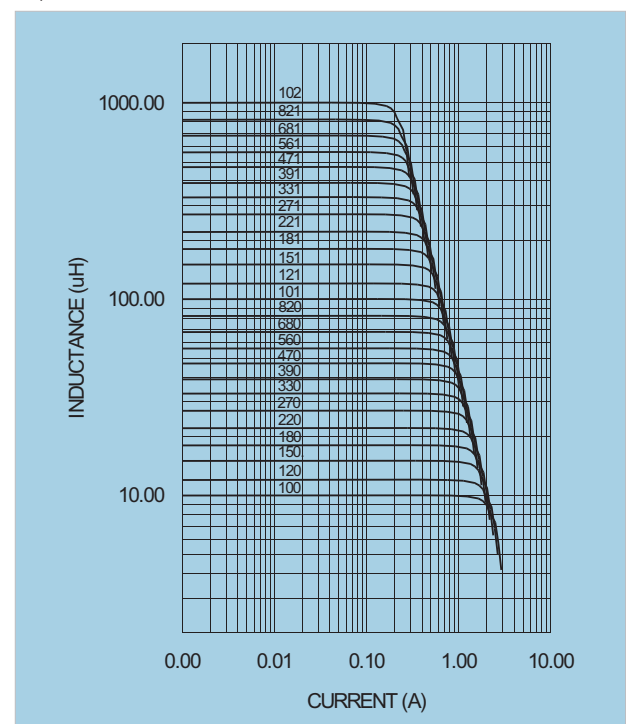
D = 5.0±0.2 / 0.197±0.008

E = 2.0±0.2 / 0.079±0.008

F = 1.1±0.2 / 0.043±0.008

**Electrical Characteristics:** 25°C, 100KHz, 0.1V for 0.45~6.8uH. 1KHz,1.0V for 10~1000uH.

| PART NO.     | L <sup>1</sup><br>(uH) | DCR<br>(Ω) MAX | Isat <sup>2</sup><br>(A dc) | I <sub>r</sub> <sup>3</sup><br>(A dc) |
|--------------|------------------------|----------------|-----------------------------|---------------------------------------|
| SIQ73A - R45 | 0.45                   | 0.0076         | 9.00                        | 9.00                                  |
| SIQ73A - 1R0 | 1.00                   | 0.012          | 6.50                        | 5.70                                  |
| SIQ73 - 1R2  | 1.20                   | 0.013          | 4.70                        | 4.70                                  |
| SIQ73C - 2R0 | 2.00                   | 0.024          | 7.30                        | 4.00                                  |
| SIQ73A - 2R2 | 2.10                   | 0.0152 ± 20%   | 5.52                        | 4.30                                  |
| SIQ73C - 3R3 | 3.30                   | 0.037          | 6.70                        | 3.20                                  |
| SIQ73 - 4R7  | 4.70                   | 0.045          | 2.30                        | 2.30                                  |
| SIQ73C - 4R7 | 4.70                   | 0.044          | 5.50                        | 2.50                                  |
| SIQ73C - 5R6 | 5.60                   | 0.050          | 5.10                        | 2.40                                  |
| SIQ73C - 6R8 | 6.80                   | 0.062          | 4.40                        | 2.10                                  |
| SIQ73 - 6R8  | 6.80                   | 0.060          | 2.00                        | 2.00                                  |
| SIQ73 - 100  | 10.00                  | 0.072          | 1.68                        | 1.68                                  |
| SIQ73 - 120  | 12.00                  | 0.098          | 1.52                        | 1.52                                  |
| SIQ73 - 150  | 15.00                  | 0.130          | 1.33                        | 1.33                                  |
| SIQ73 - 180  | 18.00                  | 0.140          | 1.20                        | 1.20                                  |
| SIQ73 - 220  | 22.00                  | 0.190          | 1.07                        | 1.07                                  |
| SIQ73 - 270  | 27.00                  | 0.210          | 0.96                        | 0.96                                  |
| SIQ73 - 330  | 33.00                  | 0.240          | 0.91                        | 0.91                                  |
| SIQ73 - 390  | 39.00                  | 0.320          | 0.77                        | 0.77                                  |
| SIQ73 - 470  | 47.00                  | 0.360          | 0.76                        | 0.76                                  |
| SIQ73 - 560  | 56.00                  | 0.470          | 0.68                        | 0.68                                  |
| SIQ73 - 680  | 68.00                  | 0.520          | 0.61                        | 0.61                                  |
| SIQ73 - 820  | 82.00                  | 0.690          | 0.57                        | 0.57                                  |
| SIQ73 - 101  | 100.00                 | 0.790          | 0.50                        | 0.50                                  |
| SIQ73 - 121  | 120.00                 | 0.890          | 0.49                        | 0.49                                  |
| SIQ73 - 151  | 150.00                 | 1.270          | 0.43                        | 0.43                                  |
| SIQ73 - 181  | 180.00                 | 1.450          | 0.39                        | 0.39                                  |
| SIQ73 - 221  | 220.00                 | 1.650          | 0.35                        | 0.35                                  |
| SIQ73 - 271  | 270.00                 | 2.310          | 0.32                        | 0.32                                  |
| SIQ73 - 331  | 330.00                 | 2.620          | 0.28                        | 0.28                                  |
| SIQ73 - 391  | 390.00                 | 2.940          | 0.26                        | 0.26                                  |
| SIQ73 - 471  | 470.00                 | 4.180          | 0.24                        | 0.24                                  |
| SIQ73 - 561  | 560.00                 | 4.670          | 0.22                        | 0.22                                  |
| SIQ73 - 681  | 680.00                 | 5.730          | 0.19                        | 0.19                                  |
| SIQ73 - 821  | 820.00                 | 6.540          | 0.18                        | 0.18                                  |
| SIQ73 - 102  | 1000.00                | 9.440          | 0.16                        | 0.16                                  |



1. Tolerance of inductance: ±20% .
2. Isat is the DC current which cause the inductance drop less than 25% of its nominal inductance without current. ( 30% Typ. for SIQ73C)
3. Ir is the DC current which cause the surface temperature of the part increase less than 45°C.
4. Operating temperature: -20°C to 105°C (including self-temperature rise).



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