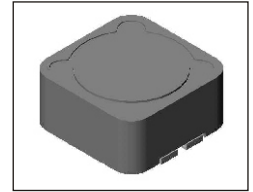


# SMT Power Inductor

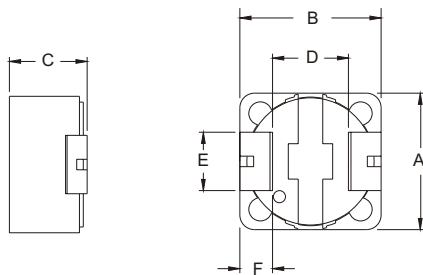
## SIQ124R Type

### Features

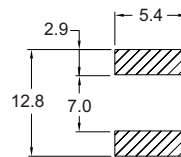
- RoHS compliant.
- Low profile(11A, 1.5uH) SMD type.
- Magnetically shielded, suitable for high density mounting.
- High energy storage and low DCR.
- Provided with embossed carrier tape packing.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.



### Mechanical Dimension :



### RECOMMENDED PAD PATTERNS



UNIT:mm/inch

A = 12.2 ± 0.3 / 0.480 ± 0.012

B = 12.2 ± 0.3 / 0.480 ± 0.012

C = 4.5 / 0.177 Max.

D = 7.6 ± 0.3 / 0.299 ± 0.012

E = 5.0 / 0.197

F = 2.2 / 0.087

### Electrical Characteristics : 25°C : 100KHz, 0.1V

| PART NO.       | L <sup>1</sup><br>(uH) | DCR<br>(mΩ) MAX | Isat <sup>2</sup><br>(A dc) | I <sub>r</sub> <sup>3</sup><br>(A dc) |
|----------------|------------------------|-----------------|-----------------------------|---------------------------------------|
| SIQ124R - 1R5  | 1.5                    | 5.8             | 11.00                       | 11.00                                 |
| SIQ124R - 2R0  | 2.0                    | 9.0             | 10.00                       | 10.00                                 |
| SIQ124RA - 2R0 | 2.0                    | 9.2             | 12.40                       | 7.40                                  |
| SIQ124R - 2R7  | 2.7                    | 10.8            | 9.00                        | 9.00                                  |
| SIQ124RA - 3R3 | 3.3                    | 16.0            | 10.00                       | 6.70                                  |
| SIQ124R - 3R9  | 3.9                    | 15.0            | 6.50                        | 6.50                                  |
| SIQ124R - 4R7  | 4.7                    | 18.0            | 5.70                        | 5.70                                  |
| SIQ124RA - 5R6 | 5.6                    | 25.0            | 8.20                        | 6.10                                  |
| SIQ124R - 6R8  | 6.8                    | 23.0            | 4.90                        | 4.90                                  |
| SIQ124RA - 6R8 | 6.8                    | 29.0            | 7.20                        | 5.30                                  |
| SIQ124R - 100  | 10.0                   | 28.0            | 4.50                        | 4.50                                  |
| SIQ124RA - 100 | 10.0                   | 42.0            | 6.00                        | 4.70                                  |
| SIQ124R - 120  | 12.0                   | 36.0            | 4.00                        | 4.00                                  |
| SIQ124R - 150  | 15.0                   | 50.0            | 3.20                        | 3.20                                  |
| SIQ124R - 180  | 18.0                   | 57.0            | 3.10                        | 3.10                                  |
| SIQ124R - 220  | 22.0                   | 66.0            | 2.90                        | 2.90                                  |
| SIQ124R - 270  | 27.0                   | 80.0            | 2.80                        | 2.80                                  |
| SIQ124R - 330  | 33.0                   | 97.0            | 2.70                        | 2.70                                  |
| SIQ124R - 390  | 39.0                   | 132.0           | 2.10                        | 2.10                                  |
| SIQ124R - 470  | 47.0                   | 150.0           | 1.90                        | 1.90                                  |
| SIQ124R - 560  | 56.0                   | 190.0           | 1.80                        | 1.80                                  |
| SIQ124R - 680  | 68.0                   | 220.0           | 1.50                        | 1.50                                  |
| SIQ124R - 820  | 82.0                   | 260.0           | 1.30                        | 1.30                                  |
| SIQ124R - 101  | 100.0                  | 308.0           | 1.20                        | 1.20                                  |
| SIQ124R - 121  | 120.0                  | 380.0           | 1.10                        | 1.10                                  |
| SIQ124R - 151  | 150.0                  | 530.0           | 0.95                        | 0.95                                  |
| SIQ124R - 181  | 180.0                  | 620.0           | 0.85                        | 0.85                                  |
| SIQ124R - 221  | 220.0                  | 700.0           | 0.80                        | 0.80                                  |
| SIQ124R - 271  | 270.0                  | 876.0           | 0.60                        | 0.60                                  |
| SIQ124R - 331  | 330.0                  | 990.0           | 0.50                        | 0.50                                  |

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.

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).



DELTA ELECTRONICS, INC.

(TAOYUAN PLANT CPBG) 252, SAN YING ROAD, KUEISAN INDUSTRIAL ZONE, TAOYUAN SHIEN, 333, TAIWAN, R.O.C.

TEL: 886-3-3591968; FAX: 886-3-3591991

http://www.deltawww.com