

**MOLDED CHIP INDUCTOR  
SERIES IC1210**

**FEATURES**

- High reliability, excellent for automatic insertion in high density circuit designs
- Large electrodes and strong terminals allow a more secure bonding to solder pads
- Ideal for replacing through hole inductors where higher density and more reliability are required

**ELECTRICAL CHARACTERISTICS**

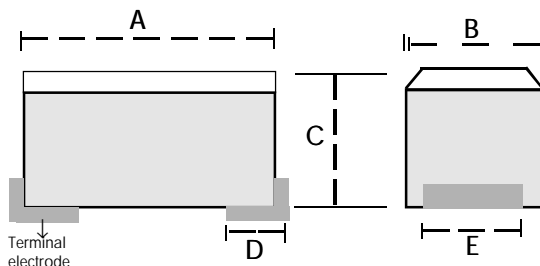
- Inductance range 0.010μH to 220μH
- Tolerance ±20% for values under 1.0μH  
±10% for values above 1.0μH  
Special tolerances are available on special order
- Current rating Based on current flow and temperature rise of 20°C maximum
- Testing procedure L & Q are measured with HP4191A & HP4192A

**PHYSICAL CHARACTERISTICS**

- Operating Temperature -55°C to +105°C
- Construction Wire wound, epoxy molding
- Soldering heat resistance 240°C for 10 seconds
- Solderability Preheat: 120°C  
4 minutes  
Solder temperature: 215°C  
Dwelling time: 3 seconds  
95% of terminals are covered with solder
- Terminal Lead frame
- Terminal strength 3 lbs pull test
- Resistance to solvent Conforms to MIL-STD-202E
- Marking On part: Inductance  
On reel: Part number, Quantity, Production date
- Packaging 2000 pieces per Reel
- Reel specifications 178mm paper reel with embossed carrier tape 8mm width, 4mm pitch

**DIMENSIONS IN MILLIMETERS**

- Body length A 3.2mm ±0.2mm
- Body width B 2.5mm ±0.2mm
- Body height C 2.2mm ±0.2mm
- Terminal length D 0.5mm ±0.1mm
- Terminal width E 1.7mm ±0.1mm



**SPECIFICATIONS**

| Part Number  | L (μH) | Tol (%) | Q Min | Test Freq (MHz) | SRF Min (MHz) | DCR Max (Ω) | Rated Current (mA) |
|--------------|--------|---------|-------|-----------------|---------------|-------------|--------------------|
| IC1210-R010M | .010   | ±20     | 15    | 100             | 2500          | 0.13        | 450                |
| IC1210-R012M | .012   |         | 17    |                 | 2300          | 0.14        | 450                |
| IC1210-R015M | .015   |         | 19    |                 | 2100          | 0.16        | 450                |
| IC1210-R018M | .018   |         | 21    |                 | 1900          | 0.18        | 450                |
| IC1210-R022M | .022   |         | 23    |                 | 1700          | 0.20        | 450                |
| IC1210-R027M | .027   |         | 23    |                 | 1500          | 0.22        | 450                |
| IC1210-R033M | .033   |         | 25    |                 | 1400          | 0.24        | 450                |
| IC1210-R039M | .039   |         | 25    |                 | 1300          | 0.27        | 450                |
| IC1210-R047M | .047   |         | 26    |                 | 1200          | 0.30        | 450                |
| IC1210-R056M | .056   |         | 26    |                 | 1100          | 0.33        | 450                |
| IC1210-R068M | .068   |         | 27    |                 | 1000          | 0.36        | 450                |
| IC1210-R082M | .082   |         | 27    |                 | 900           | 0.40        | 450                |
| IC1210-R10M  | 0.10   |         | 28    | 25.2            | 700           | 0.44        | 450                |
| IC1210-R12M  | 0.12   |         | 28    |                 | 500           | 0.22        | 450                |
| IC1210-R15M  | 0.15   |         | 28    |                 | 450           | 0.25        | 450                |
| IC1210-R18M  | 0.18   |         | 28    |                 | 400           | 0.28        | 450                |
| IC1210-R22M  | 0.22   |         | 28    |                 | 350           | 0.32        | 450                |
| IC1210-R27M  | 0.27   |         | 28    |                 | 320           | 0.36        | 450                |
| IC1210-R33M  | 0.33   |         | 28    |                 | 300           | 0.40        | 450                |
| IC1210-R39M  | 0.39   |         | 28    |                 | 250           | 0.45        | 450                |
| IC1210-R47M  | 0.47   |         | 28    |                 | 220           | 0.50        | 450                |
| IC1210-R56M  | 0.56   |         | 28    |                 | 180           | 0.55        | 450                |
| IC1210-R68M  | 0.68   |         | 28    |                 | 160           | 0.68        | 450                |
| IC1210-R82M  | 0.82   |         | 28    |                 | 140           | 0.65        | 450                |
| IC1210-1R0K  | 1.0    | ±10     | 28    | 7.96            | 120           | 0.70        | 400                |
| IC1210-1R2K  | 1.2    |         | 28    |                 | 100           | 0.75        | 390                |
| IC1210-1R5K  | 1.5    |         | 28    |                 | 85            | 0.85        | 370                |
| IC1210-1R8K  | 1.8    |         | 28    |                 | 80            | 0.90        | 350                |
| IC1210-2R2K  | 2.2    |         | 30    |                 | 75            | 1.00        | 320                |
| IC1210-2R7K  | 2.7    |         | 30    |                 | 70            | 1.10        | 290                |
| IC1210-3R3K  | 3.3    |         | 30    |                 | 60            | 1.20        | 260                |
| IC1210-3R9K  | 3.9    |         | 30    |                 | 55            | 1.30        | 250                |
| IC1210-4R7K  | 4.7    |         | 30    |                 | 50            | 1.70        | 220                |
| IC1210-5R6K  | 5.6    |         | 30    |                 | 47            | 1.80        | 200                |
| IC1210-6R8K  | 6.8    |         | 30    |                 | 43            | 2.00        | 180                |
| IC1210-8R2K  | 8.2    |         | 30    |                 | 40            | 2.30        | 170                |
| IC1210-100K  | 10     |         | 30    | 2.52            | 36            | 2.50        | 150                |
| IC1210-120K  | 12     |         | 30    |                 | 33            | 2.80        | 140                |
| IC1210-150K  | 15     |         | 30    |                 | 30            | 3.20        | 130                |
| IC1210-180K  | 18     |         | 30    |                 | 27            | 3.60        | 120                |
| IC1210-220K  | 22     |         | 30    |                 | 25            | 4.00        | 110                |
| IC1210-270K  | 27     |         | 30    |                 | 20            | 5.00        | 80                 |
| IC1210-330K  | 33     |         | 30    |                 | 17            | 5.60        | 70                 |
| IC1210-390K  | 39     |         | 30    |                 | 16            | 6.40        | 65                 |
| IC1210-470K  | 47     |         | 30    |                 | 15            | 7.00        | 60                 |
| IC1210-560K  | 56     |         | 30    |                 | 13            | 8.00        | 55                 |
| IC1210-680K  | 68     |         | 30    |                 | 12            | 9.00        | 50                 |
| IC1210-820K  | 82     |         | 30    |                 | 11            | 10.0        | 45                 |
| IC1210-101K  | 100    |         | 20    | 0.796           | 10            | 10.0        | 40                 |
| IC1210-121K  | 120    |         | 20    |                 | 10            | 11.0        | 70                 |
| IC1210-151K  | 150    |         | 20    |                 | 8             | 15.0        | 65                 |
| IC1210-181K  | 180    |         | 20    |                 | 7             | 17.0        | 60                 |
| IC1210-221K  | 220    |         | 20    |                 | 7             | 21.0        | 50                 |