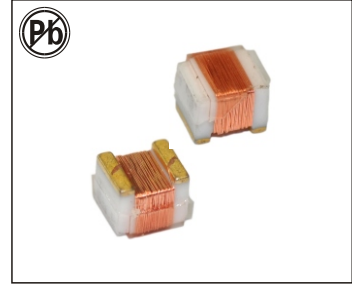


# SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

## AISC1210 SERIES



### FEATURES:

- Multilayer monolithic construction yields high reliability
- High self-resonant frequency
- Excellent solderability and heat resistance for either flow or reflow soldering

### COMMON APPLICATIONS:

- High frequency circuits of telecommunication.
- Bluetooth
- Mobile phones such as GSM, CDMA, PDC, etc.
- Other High frequency circuits in general

### ELECTRICAL CHARACTERISTICS:

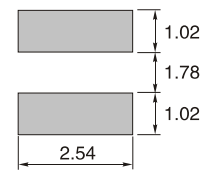
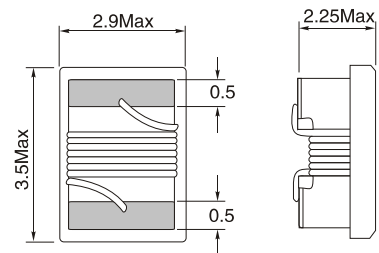
Part Number	L(nH)	Tolerance (%)	Q Min	SRF (GHz) Min	DCR (Ω) Max	IDC (mA) Max
AISC1210-3N9□	3.9@100MHz	10	30@300MHz	6.00	0.050	1000
AISC1210-4N7□	4.7@100MHz	10,5	30@300MHz	5.80	0.065	1000
AISC1210-8N2□	8.2@100MHz	10	30@300MHz	5.50	0.070	1000
AISC1210-10N□	10@100MHz	10,5,2	40@300MHz	4.00	0.080	1000
AISC1210-12N□	12@100MHz	10,5	40@300MHz	3.20	0.080	1000
AISC1210-15N□	15@100MHz	10,5	40@300MHz	3.20	0.100	1000
AISC1210-18N□	18@100MHz	10,5,2	50@300MHz	2.80	0.100	1000
AISC1210-22N□	22@100MHz	10,5	50@300MHz	2.00	0.100	1000
AISC1210-27N□	27@100MHz	10,5,2	50@300MHz	1.80	0.110	1000
AISC1210-33N□	33@100MHz	10,5,2	55@300MHz	1.80	0.110	1000
AISC1210-39N□	39@100MHz	10,5,2	55@300MHz	1.80	0.120	1000
AISC1210-47N□	47@100MHz	10,5,2	55@300MHz	1.50	0.130	1000
AISC1210-56N□	56@100MHz	10,5,2	55@300MHz	1.45	0.140	1000
AISC1210-68N□	68@100MHz	10,5,2	55@300MHz	1.20	0.150	900
AISC1210-82N□	82@100MHz	10,5,2	55@300MHz	1.00	0.200	900
AISC1210-R10□	100@100MHz	10,5,2	55@300MHz	0.90	0.210	850
AISC1210-R12□	120@100MHz	10,5,2	60@300MHz	0.80	0.210	800
AISC1210-R15□	150@100MHz	10,5,2	60@300MHz	0.78	0.250	750
AISC1210-R18□	180@50MHz	10,5,2	60@300MHz	0.76	0.300	700
AISC1210-R22□	220@50MHz	10,5,2	60@300MHz	0.65	0.320	670
AISC1210-R27□	270@50MHz	10,5,2	55@300MHz	0.62	0.340	630
AISC1210-R33□	330@50MHz	10,5,2	45@150MHz	0.60	0.380	590
AISC1210-R39□	390@50MHz	10,5,2	45@150MHz	0.51	0.580	530
AISC1210-R47□	470@50MHz	10,5,2	45@150MHz	0.50	0.800	490
AISC1210-R56□	560@35MHz	10,5	45@150MHz	0.42	1.100	460
AISC1210-R68□	680@35MHz	10,5,2	45@150MHz	0.40	1.200	430
AISC1210-R75□	750@35MHz	10,5,2	45@150MHz	0.38	1.70	400
AISC1210-R82□	820@35MHz	10,5,2	45@150MHz	0.37	1.820	400
AISC1210-1R0□	1000@35MHz	10,5,2	45@150MHz	0.34	1.850	320
AISC1210-1R2□	1200@35MHz	10,5	35@150MHz	0.22	1.870	300
AISC1210-1R5□	1500@7.9MHz	10,5	30@50MHz	0.16	1.950	310
AISC1210-1R8□	1800@7.9MHz	10,5	30@50MHz	0.16	2.250	310
AISC1210-2R2□	2200@7.9MHz	10,5	30@50MHz	0.11	2.410	310
AISC1210-2R7□	2700@7.9MHz	10,5	25@25MHz	0.10	2.850	300
AISC1210-3R3□	3300@7.9MHz	10,5	20@25MHz	0.09	3.120	300
AISC1210-3R9□	3900@7.9MHz	10,5	20@25MHz	0.08	3.600	290
AISC1210-4R7□	4700@7.9MHz	10,5	16@25MHz	0.06	4.000	280
AISC1210-5R6□	5600@7.9MHz	10,5	20@7.9MHz	0.06	5.000	250
AISC1210-6R8□	6800@7.9MHz	10,5	20@7.9MHz	0.06	8.000	230
AISC1210-8R2□	8200@7.9MHz	10,5	20@7.9MHz	0.05	8.600	170
AISC1210-100□	10000@7.9MHz	10,5	22@7.9MHz	0.02	6.800	200

### TECHNICAL INFORMATION:

- Testing: (Equivalent acceptable)  
Inductance: HP4191A  
Q:HP4291A  
SRF:HP8753B  
RDC:measured @ 25°C
- Operating Temperature:  
Ceramic-55°C to +125°C
- Pad metalization: Tungsten-nickel with gold flash
- Solder methods: Wave, Reflow, Vapor Phase
- Solderability: Max 260°C for 10 seconds

### PHYSICAL CHARACTERISTICS:

Dimensions:(mm)



PCB LAYOUT

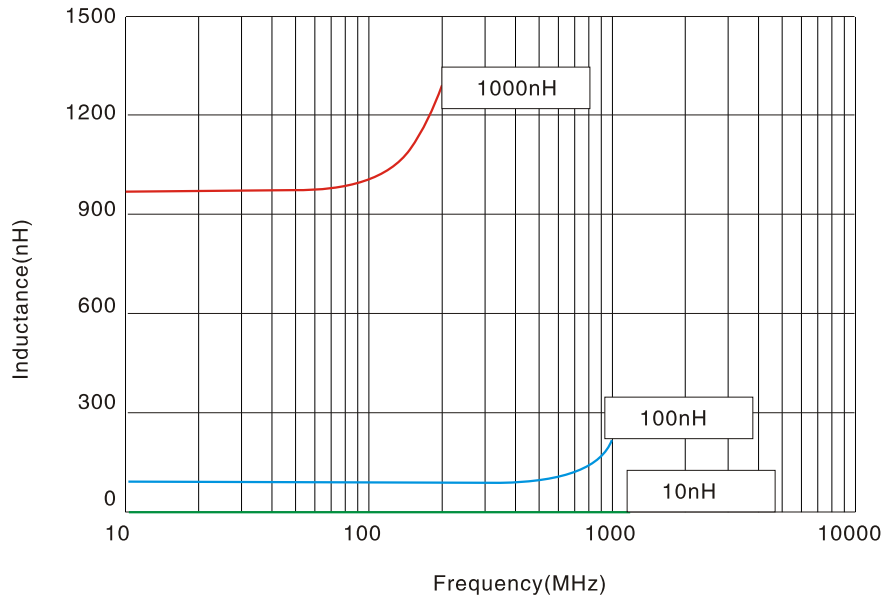
Winding



- G= ± 2%, J= ± 5%, K= ± 10%,  
M= ± 20%, N= ± 30%

# SURFACE-MOUNT WIRE WOUND CERAMIC CHIP INDUCTORS

Inductance vs Frequency



Q vs Frequency

