



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

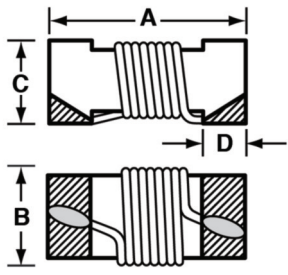
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SERIES S0402

Hi-Rel Surface Mount Chip Inductors



← Actual Size (Max.)

Physical Parameters

	Inches	Millimeters
D	0.006 - 0.010	0.152 - 0.254
A	0.037 - 0.043	0.940 - 1.092
B	0.018 - 0.025	0.457 - 0.635
C	0.030 Max.	0.762 Max.

Operating Temperature Range -55°C to +125°C

Current Rating at 90°C Ambient +35°C Rise

Insulation Resistance at 100 Vdc 1000 Mohm Min.

Dielectric Withstanding Voltage (DWV) 200 Vrms.

Core Material / Termination

Al₂O₃ / Sintered MoMn / Electroplated Ni / Electroplated Au Finish (RoHS)

- Termination Options: 1. Au Finish (RoHS)
 2. SnPb Solder
 3. Pb Free Solder (RoHS)

Electrical Characteristics Measured at +25°C

DASH NUMBER*	INDUCTANCE (nH) ± 5%	Q MINIMUM	INDUCTANCE & Q TEST FREQUENCY (MHz)	SRF MINIMUM (MHz)	DC RESISTANCE MAXIMUM (OHMS)	CURRENT RATING MAXIMUM (mA)
--------------	----------------------	-----------	-------------------------------------	-------------------	------------------------------	-----------------------------

SERIES S0402						
-2N2J	2.2	18	250	8500	0.090	950
-3N3J	3.3	18	250	7000	0.080	800
-4N7J	4.7	14	250	4700	0.150	600
-6N8J	6.8	19	250	4800	0.100	600
-8N2J	8.2	20	250	4400	0.130	600
-10NJ	10.0	20	250	3900	0.210	475
-12NJ	12.0	21	250	3600	0.220	475
-15NJ	15.0	23	250	3280	0.220	475
-22NJ	22.0	24	250	2800	0.350	400
-27NJ	27.0	23	250	2480	0.360	400
-33NJ	33.0	23	250	2350	0.370	400
-47NJ	47.0	19	250	2100	0.830	150
-56NJ	56.0	21	250	1700	1.000	100
-68NJ	68.0	20	250	1620	1.180	100

Inductance Tolerance Options H (± 3%), G (± 2%), F (± 1%)

S0402 Test Plan Advantages

- Provides multiple screening alternatives
- Eliminates necessity for SCD's
- Provides quicker delivery
- Reduces overall costs

How To Order:

S0402	8N2	G	2	S	(A) Inductor Series
(A)	(B)	(C)	(D)	(E)	(B) Inductance Value
					(C) Inductance Tolerance
					(D) Termination Finish
					(E) Test Plan Screening

S0402 Test Plan Options

Ordering Option Code		S	C	B	D	E
Screening Level		MIL-STD-981 Class "S"	MIL-STD-981 Class "S" Modified	MIL-STD-981 Class "B"	MIL-STD-981 Class "B" Modified	High Temp
Test	Method					
Thermal Shock	MIL-PRF-83446	25 Cycles 1/ (-55°C to +125°C)	25 Cycles (-55°C to +125°C)	25 Cycles 1/ (-55°C to +125°C)	25 Cycles (-55°C to +125°C)	5 Cycles (-55°C to +175°C)
No-Load Burn-In	MIL-STD-981	125°C (96 hours)	125°C (96 hours)	125°C (96 hours)	125°C (96 hours)	200°C (96 hours)
Dielectric Withstanding Voltage	MIL-PRF-83446	200 Vrms		200 Vrms		
Insulation Resistance	MIL-PRF-83446	1000 Mohms		1000 Mohms		
Electrical Characteristics: L, Q, DCR, SRF	MIL-PRF-83446	•	•	•	•	•
Radiographic Inspection	MIL-STD-981	•				
Visual & Dimensional Examination (external)	MIL-PRF-83446	•	•	•	•	
* Electrical Characteristics (initial): L, Q, DCR, SRF	MIL-PRF-83446	•	•			
* Low Temperature Operation	MIL-PRF-83446	•	•			
* Temperature Rise	MIL-PRF-83446	•				•
* Overload	MIL-PRF-83446	•	•			•
* Moisture Resistance	MIL-PRF-83446	•				
* Electrical Characteristics: L and Q	MIL-PRF-83446	•	•			
* High Temperature Exposure	MIL-PRF-83446	•	•			
* Electrical Characteristics (final)	MIL-PRF-83446	•	•			
* Bond Strength	MIL-PRF-83446	•	•			
* Visual & Mechanical Examination (external)	MIL-PRF-83446	•	•			
* Visual & Mechanical Examination (internal)	MIL-STD-981	•				
* Solderability	MIL-PRF-83446	•	•			
* Electrical Characteristics (initial): L, Q, DCR, SRF	MIL-PRF-83446	•	•			
* Life	MIL-PRF-83446	2000 Hours (90°C Ambient)	500 Hours (90°C Ambient)			500 Hours (175°C Ambient)
* Dielectric Withstanding Voltage	MIL-PRF-83446	80 Vrms	80 Vrms			
* Insulation Resistance	MIL-PRF-83446	1000 Mohms	1000 Mohms			
* Electrical Characteristics (final): L, Q, DCR, SRF	MIL-PRF-83446	•	•			
* Visual & Mechanical Examination (external)	MIL-PRF-83446	•	•			
Mechanical Shock/Vibration	MIL-STD-883					•

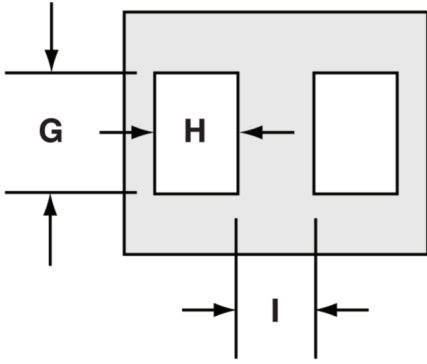
*Destructive Test Units Required

1/ Continually monitor continuity during the entire final cycle to verify no intermittent conditions.

SERIES S0402

Hi-Rel Surface Mount
Chip Inductors

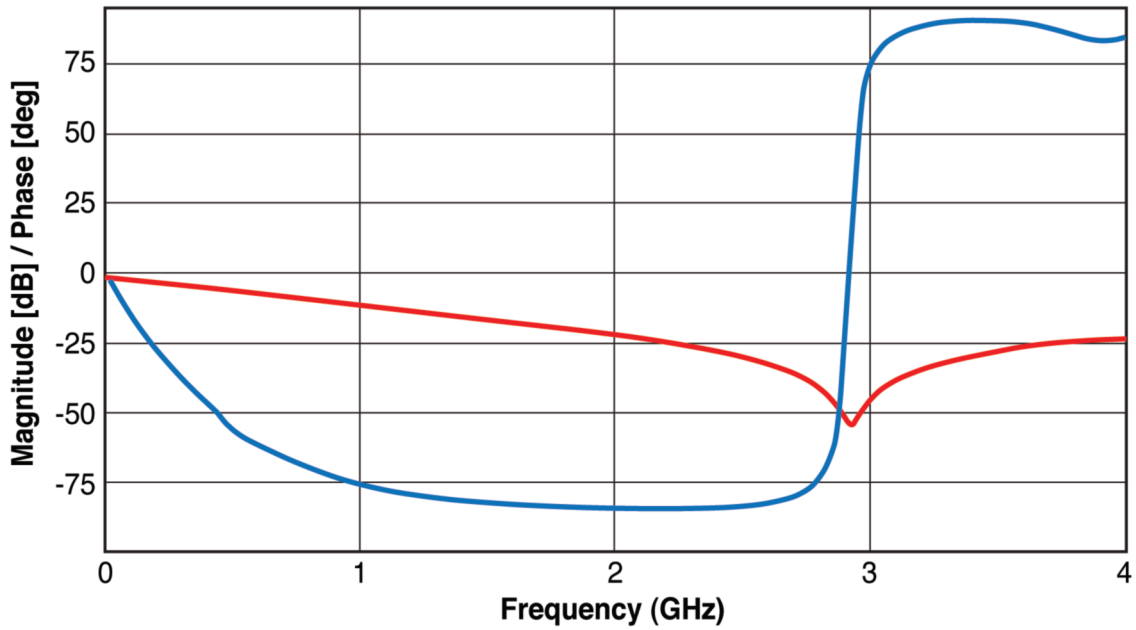
Suggested Land Patterns



Delevan Series	G		H		I	
	Inches	mm	Inches	mm	Inches	mm
S0402 Series	0.026	0.660	0.014	0.356	0.018	0.457



S-Parameters (Typical)



■ Magnitude [S(2,1)] S0402-47NK
■ Phase [S(2,1)] S0402-47NK

All product specifications and data contained herein are subject to change without notice to improve reliability, function, performance, design or otherwise.

