

## Features

- 1206 size
- Magnetic shielding
- High Q characteristics
- Nickel barrier
- RoHS compliant\*



This series is currently available but not recommended for new designs. See [Product Obsolescence Memo](#) for details.

# CS321613 Series - Ferrite Multi-Layer Chip Inductors

## Electrical Specifications

Bourns Part No.	Inductance		Q	Test Freq.	SRF MHz		DCR	I rms
	μH	Tol.%	typ.	L,Q MHz	min.	typ.	mΩ max.	mA max.
CS321613-47NK	0.047	±10	60	50	320	400	150	300
CS321613-68NK	0.068	±10	60	50	280	350	150	300
CS321613-R10K	0.10	±10	50	25	235	300	200	250
CS321613-R12K	0.12	±10	50	25	220	280	200	250
CS321613-R15K	0.15	±10	50	25	200	250	200	250
CS321613-R18K	0.18	±10	50	25	185	230	200	250
CS321613-R22K	0.22	±10	50	25	170	220	250	250
CS321613-R27K	0.27	±10	50	25	150	200	250	250
CS321613-R33K	0.33	±10	50	25	145	180	300	250
CS321613-R39K	0.39	±10	50	25	135	170	300	200
CS321613-R47K	0.47	±10	50	25	125	160	300	200
CS321613-R56K	0.56	±10	50	25	115	150	350	150
CS321613-R68K	0.68	±10	50	25	105	135	350	150
CS321613-R82K	0.82	±10	50	25	100	125	400	150
CS321613-1R0K	1.0	±10	80	10	75	105	250	100
CS321613-1R2K	1.2	±10	80	10	65	95	300	100
CS321613-1R5K	1.5	±10	80	10	60	85	300	50
CS321613-1R8K	1.8	±10	80	10	55	75	500	50
CS321613-2R2K	2.2	±10	80	10	50	70	600	50
CS321613-2R7K	2.7	±10	80	10	45	65	600	50
CS321613-3R3K	3.3	±10	85	10	40	55	700	50
CS321613-3R9K	3.9	±10	85	10	38	50	800	50
CS321613-4R7K	4.7	±10	85	10	35	48	800	50
CS321613-5R6K	5.6	±10	65	4	32	45	600	25
CS321613-6R8K	6.8	±10	65	4	29	40	600	25
CS321613-8R2K	8.2	±10	65	4	26	36	600	25
CS321613-100K	10.0	±10	65	2	24	33	700	25
CS321613-120K	12.0	±10	65	2	22	30	900	25
CS321613-150K	15.0	±10	45	1	19	27	1100	25
CS321613-180K	18.0	±10	45	1	18	25	1400	25
CS321613-220K	22.0	±10	45	1	16	22	1400	25
CS321613-270K	27.0	±10	45	1	14	20	1500	25
CS321613-330K	33.0	±10	45	0.4	13	18	1500	25

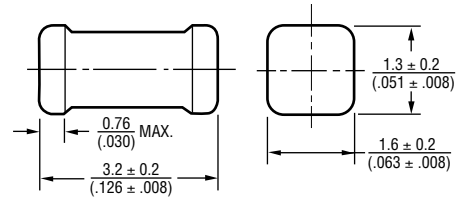
## General Specifications

Temperature Rise .....20 °C max. at rated current  
 Operating Temperature .....-55 °C to +125 °C  
 Storage Temperature .....-55 °C to +125 °C  
 Reflow Soldering ...230 °C, 50 sec. max.  
 Resistance to Soldering Heat .....260 °C, 10 seconds

## Materials

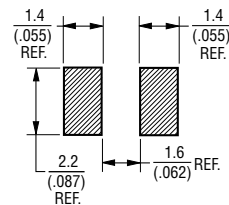
Base Material .....Ferrite  
 Terminal.....Ag/Ni/Sn  
 Packaging.....3,000 pcs. per reel

## Product Dimensions

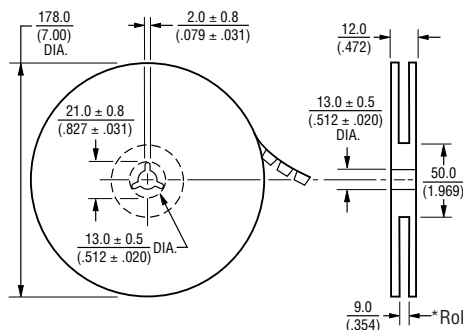


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Recommended Layout



## Packaging Specifications



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

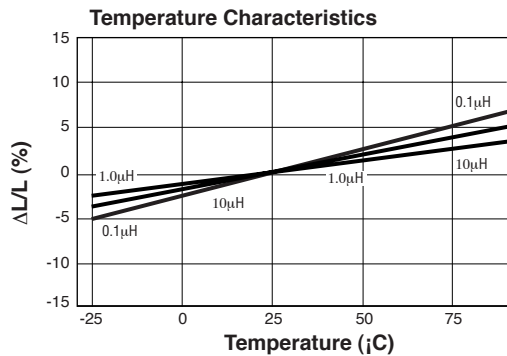
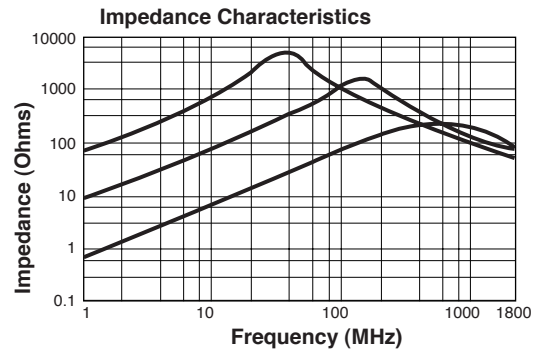
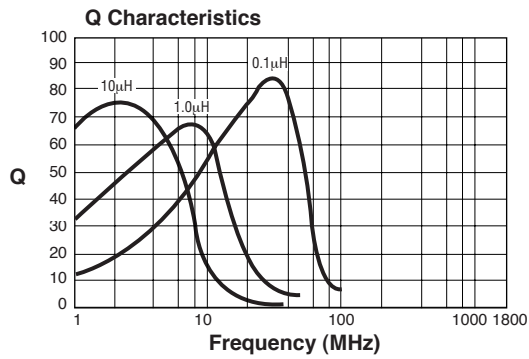
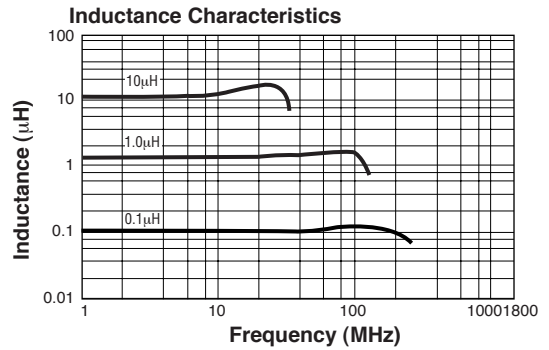
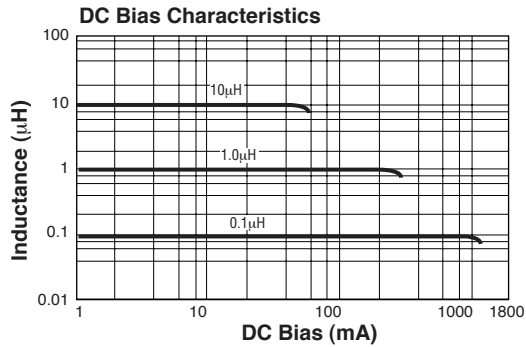
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

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## Electrical Specifications



REV. 06/13

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Customers should verify actual device performance in their specific applications.