

# High Current Ferrite Chip Beads

**Steward's** surface mount ferrite chips provide compact, cost effective EMI filtering for densely packed PCB designs. The small footprint enables placement very close to troublesome high frequency devices. Our proprietary SMT construction yields rugged components with superior impedance vs. frequency characteristics.

## Features:

- Small footprint
- Excellent retention under Bias
- Rugged, monolithic construction
- Superior impedance vs. frequency characteristics
- Economical
- Broad range of sizes (from 0805 up to 2220)
- Broad range of impedance values and current ratings

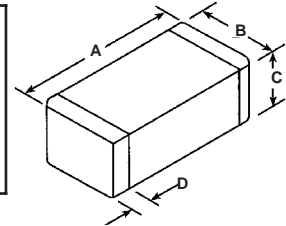
## Applications:

- Filtering of power input pins and devices using high speed clocks
- Filtering of low frequency input/output signals of shielded enclosures
- High frequency filtering of medium speed clocks and video signals
- Preventing oscillations in high frequency amplifiers
- Data bus filtration
- Discrete component filtration in power supplies

## Test Specifications:

- Maximum current ratings are determined by testing to a maximum temperature rise of 40° C with continuous operating current
- Board level components are rated up to a maximum of 75 volts
- Tested with:** • HP4396A (100KHz - 1.8 GHz) or HP8753 (to 6 GHz) Network/Spectrum Analyzer • HP43961A Impedance Test Kit • HP16192A Test Fixture or Inter-Continental Microwave custom fixtures • HP16200A DC Bias Adapter • Philips PM2811 DC Power Supply • Ambient Temperature 23.5°C ± 2° • Bandwidth 3 kHz • Sweep Time 423 ms • Impedance is rated at ± 25% @ 100MHz

PART NUMBERING SYSTEM					
HI	0805	Q	310	R	- 00
PRODUCT SERIES CODE	PART SIZE CODE	RATED CURRENT CODE	IMPEDANCE VALUE CODE	PACKAGING CODE	ADDITIONAL PART DESCRIPTION



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

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	IMPEDANCE ( Z ) TYPICAL OHMS @			DCR MAX OHMS	RATED I MAX (continuous) mA
					100MHz	500MHz	1GHz		
HI0805Q310R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.090 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	31	42	46	0.025	4,500
HI0805R121R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.090 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	120	183	152	0.020	5,000
HI1206T500R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	50	73	80	0.010	6,000
HI1206N800R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	80	120	129	0.035	3,000
HI1206N101R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	100	144	150	0.035	3,000
HI1206P121R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	120	168	124	0.030	4,000
HI1806T600R-00	4.50 ± 0.25 (0.177 ± 0.010)	1.60 ± 0.25 (0.063 ± 0.010)	1.60 ± 0.25 (0.063 ± 0.010)	0.51 ± 0.25 (0.020 ± 0.010)	60	102	107	0.010	6,000
HI1806N750R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	75	112	120	0.030	3,000
HI1812T800R-00	4.50 ± 0.25 (0.177 ± 0.010)	3.20 ± 0.25 (0.126 ± 0.010)	1.40 ± 0.25 (0.055 ± 0.010)	0.46 ± 0.20 (0.018 ± 0.008)	80	121	129	0.010	6,000
HI2220P171R-00	5.59 ± 0.51 (0.220 ± 0.020)	5.08 ± 0.25 (0.200 ± 0.010)	1.52 ± 0.25 (0.060 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	170	318	349	0.035	4,000
HI2220P251R-00	5.59 ± 0.51 (0.220 ± 0.020)	5.08 ± 0.25 (0.200 ± 0.010)	1.80 ± 0.25 (0.071 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	250	172	91	0.035	4,000
HI2220P601R-00	5.59 ± 0.51 (0.220 ± 0.020)	5.08 ± 0.25 (0.200 ± 0.010)	3.30 MAX (0.130 MAX)	0.76 ± 0.25 (0.030 ± 0.010)	600	128	87	0.035	4,000
HI2220V801R-00	5.59 ± 0.51 (0.220 ± 0.020)	5.08 ± 0.25 (0.200 ± 0.010)	3.45 ± 0.25 (0.136 ± 0.010)	0.76 ± 0.25 (0.030 ± 0.010)	800	123	78	0.010	8,000

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