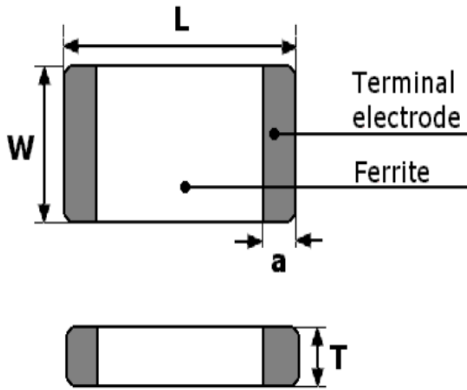




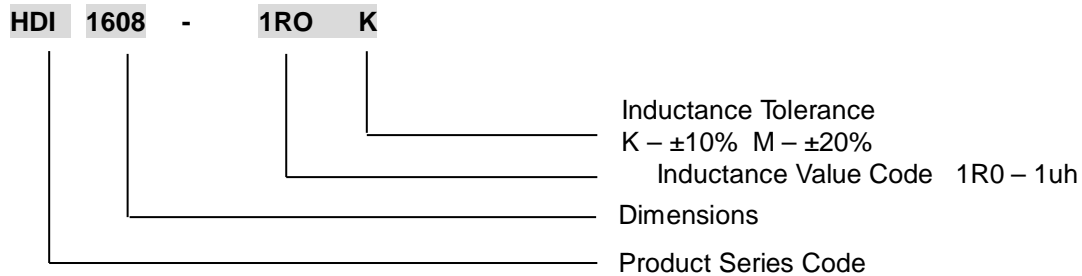
Multilayer Ferrite Chip Inductor - (HDI)

■ Dimensions and Construction



TYPE	L mm	W mm	T mm	a mm
100505 (0402)	1.0±0.05	0.5±0.05	0.5±0.05	0.1~0.3
160808 (0603)	1.6±0.15	0.8±0.15	0.8±0.15	0.2~0.6
201209 (0805)	2.0±0.2	1.25±0.2	0.90±0.2	0.2~0.8
321609 (1206)	3.2±0.2	1.6±0.2	0.9±0.2	0.4~1.0

■ Part Numbering System



■ Electrical Characteristics

(1) Operating Temperature Ranges: -25 ~ 85°C.

(2) Rated Current(ceramic material): DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.



HDI1005 (0402)

Part Number	Inductance Tolerance	Min. Quality Factor	Test Frequency	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	(μH)	Q	(MHz)	(MHz)	(Ω)	(mA)	(mm)[inch]
HDI1005-47NM	0.047 \pm 20%	10	50	220	0.45	25	0.5 \pm 0.15 [.020 \pm .006]
HDI1005-68NM	0.068 \pm 20%	10	50	210	0.45	25	
HDI1005-82NM	0.082 \pm 20%	10	50	200	0.45	25	
HDI1005-R10K	0.1 \pm 10%	10	25	200	0.8	25	
HDI1005-R12K	0.12 \pm 10%	10	25	165	0.8	25	
HDI1005-R15K	0.15 \pm 10%	10	25	140	0.9	25	
HDI1005-R18K	0.18 \pm 10%	10	25	120	0.9	25	
HDI1005-R22K	0.22 \pm 10%	10	25	110	1.2	25	
HDI1005-R27K	0.27 \pm 10%	15	25	95	1.2	25	
HDI1005-R33K	0.33 \pm 10%	15	25	85	1.25	18	
HDI1005-R39K	0.39 \pm 10%	20	10	85	0.6	15	
HDI1005-R47K	0.47 \pm 10%	20	10	80	0.7	15	
HDI1005-R56K	0.56 \pm 10%	20	10	75	0.8	15	
HDI1005-R68K	0.68 \pm 10%	20	10	70	0.9	15	
HDI1005-R82K	0.82 \pm 10%	20	10	65	0.9	15	
HDI1005-1R0K	1.0 \pm 10%	20	10	60	1.0	15	
HDI1005-1R2K	1.2 \pm 10%	20	10	55	1.25	15	
HDI1005-1R5K	1.5 \pm 10%	20	10	50	1.4	15	
HDI1005-1R8K	1.8 \pm 10%	20	10	45	1.55	15	
HDI1005-2R2K	2.2 \pm 10%	20	10	40	1.7	10	
HDI1005-2R7K	2.7 \pm 10%	20	10	28	2.4	10	
HDI1005-3R3K	3.3 \pm 10%	20	10	28	2.7	10	



HDI1608 (0603)

Part Number	Inductance Tolerance	Min. Quality Factor	Test Frequency	Min.Self-resonant Frequency	Max.DC Resistance	Max.Rated Current	Thickness
Units	(μ H)	Q	(MHz)	(MHz)	(Ω)	(mA)	(mm)[inch]
HDI1608-47NM	0.047 \pm 20%	10	50	260	0.30	50	0.8 \pm 0.15 [.031 \pm .006]
HDI1608-68NM	0.068 \pm 20%	10	50	250	0.30	50	
HDI1608-82NM	0.082 \pm 20%	10	50	245	0.30	50	
HDI1608-R10K	0.10 \pm 10%	15	25	240	0.50	50	
HDI1608-R12K	0.12 \pm 10%,	15	25	205	0.50	50	
HDI1608-R15K	0.15 \pm 10%	15	25	180	0.60	50	
HDI1608-R18K	0.18 \pm 10%	15	25	165	0.60	50	
HDI1608-R22K	0.22 \pm 10%	15	25	150	0.80	50	
HDI1608-R27K	0.27 \pm 10%	15	25	136	0.80	50	
HDI1608-R33K	0.33 \pm 10%	15	25	125	0.85	35	
HDI1608-R39K	0.39 \pm 10%	15	25	110	1.00	35	
HDI1608-R47K	0.47 \pm 10%	15	25	105	1.35	35	
HDI1608-R56K	0.56 \pm 10%	15	25	95	1.55	35	
HDI1608-R68K	0.68 \pm 10%	15	25	90	1.70	35	
HDI1608-R82K	0.82 \pm 10%	15	25	85	2.10	35	
HDI1608-1R0K	1.0 \pm 10%	35	10	75	0.60	25	
HDI1608-1R2K	1.2 \pm 10%	35	10	65	0.80	25	
HDI1608-1R5K	1.5 \pm 10%	35	10	60	0.80	25	
HDI1608-1R8K	1.8 \pm 10%	35	10	55	0.95	25	
HDI1608-2R2K	2.2 \pm 10%	35	10	50	1.15	15	
HDI1608-2R7K	2.7 \pm 10%	35	10	45	1.35	15	
HDI1608-3R3K	3.3 \pm 10%	35	10	40	1.55	15	
HDI1608-3R9K	3.9 \pm 10%	35	10	35	1.70	15	
HDI1608-4R7K	4.7 \pm 10%	35	10	33	2.10	15	
HDI1608-5R6K	5.6 \pm 10%,	35	4	22	1.55	5	
HDI1608-6R8K	6.8 \pm 10%	35	4	20	1.70	5	
HDI1608-8R2K	8.2 \pm 10%	35	4	18	2.10	5	
HDI1608-100K	10 \pm 10%	30	2	17	1.85	3	
HDI1608-120K	12 \pm 10%	30	2	15	2.10	3	
HDI1608-150K	15 \pm 10%	20	1	14	1.70	1	
HDI1608-180K	18 \pm 10%	20	1	13	2.00	1	
HDI1608-220K	22 \pm 10%	20	1	11	2.10	1	
HDI1608-270M	22 \pm 20%	20	1	10	2.75	1	
HDI1608-330M	33 \pm 20%	20	1	9	2.95	1	



HDI2012 (0805)

Electrical Characteristics 电气特性

Part Number	Inductance Tolerance	Min. Quality Factor	Test Frequency	Min.Self-resonant Frequency	Max.DC Resistance	Max.Rated Current	Thickness
Units	(μH)	Q	(MHz)	(MHz)	(Ω)	(mA)	(mm)[inch]
HDI2012-47NM	0.047 \pm 20%	15	50	320	0.20	300	0.85 \pm 0.2 [.033 \pm .008]
HDI2012-68NM	0.068 \pm 20%	15	50	280	0.20	300	
HDI2012-82NM	0.082 \pm 20%	15	50	255	0.20	300	
HDI2012-R10K	0.10 \pm 10%	20	25	235	0.30	250	
HDI2012-R12K	0.12 \pm 10%	20	25	220	0.30	250	
HDI2012-R15K	0.15 \pm 10%	20	25	200	0.40	250	
HDI2012-R18K	0.18 \pm 10%	20	25	185	0.40	250	
HDI2012-R22K	0.22 \pm 10%	20	25	170	0.50	250	
HDI2012-R27K	0.27 \pm 10%	20	25	150	0.50	250	
HDI2012-R33K	0.33 \pm 10%	20	25	145	0.55	250	
HDI2012-R39K	0.39 \pm 10%	25	25	135	0.65	200	
HDI2012-R47K	0.47 \pm 10%	25	25	125	0.65	200	
HDI2012-R56K	0.56 \pm 10%	25	25	115	0.75	150	
HDI2012-R68K	0.68 \pm 10%	25	25	105	0.80	150	
HDI2012-R82K	0.82 \pm 10%	25	25	100	1.00	150	
HDI2012-1R0K	1.0 \pm 10%	45	10	75	0.40	50	
HDI2012-1R2K	1.2 \pm 10%	45	10	65	0.50	50	
HDI2012-1R5K	1.5 \pm 10%	45	10	60	0.50	50	
HDI2012-1R8K	1.8 \pm 10%	45	10	55	0.60	50	
HDI2012-2R2K	2.2 \pm 10%	45	10	50	0.65	30	
HDI2012-2R7K	2.7 \pm 10%	45	10	45	0.75	30	
HDI2012-3R3K	3.3 \pm 10%	45	10	41	0.80	30	
HDI2012-3R9K	3.9 \pm 10%	45	10	38	0.90	30	
HDI2012-4R7K	4.7 \pm 10%	45	10	35	1.00	30	
HDI2012-5R6K	5.6 \pm 10%	50	4	32	0.90	15	
HDI2012-6R8K	6.8 \pm 10%	50	4	29	1.00	15	
HDI2012-8R2K	8.2 \pm 10%	50	4	26	1.10	15	
HDI2012-100K	10 \pm 10%	50	2	24	1.15	15	
HDI2012-120K	12 \pm 10%	50	2	22	1.25	15	
HDI2012-150K	15 \pm 10%	30	1	19	0.80	5	
HDI2012-180K	18 \pm 10%	30	1	18	0.90	5	
HDI2012-220K	22 \pm 10%	30	1	16	1.10	5	
HDI2012-270K	27 \pm 10%	30	1	14	1.15	5	
HDI2012-330K	33 \pm 10%	30	1	13	1.25	5	
HDI2012-390K	39 \pm 10%	35	1	8	2.90	4	
HDI2012-470K	47 \pm 10%	35	1	7.5	3.00	4	
HDI2012-101M	100 \pm \pm 20%	25	1	7	3.10	2	



HDI3216 (1206)

Part Number	Inductance Tolerance	Min. Quality Factor	Test Frequency	Min.Self-resonant Frequency	Max.DC Resistance	Max.Rated Current	Thickness
Units	(μH)	Q	(MHz)	(MHz)	(Ω)	(mA)	(mm)[inch]
HDI3216-47NM	0.047 \pm 20%	20	50	320	0.15	300	0.85 \pm 0.2 [.033 \pm .008]
HDI3216-68NM	0.068 \pm 20%	20	50	280	0.25	300	
HDI3216-82NM	0.082 \pm 20%	20	50	255	0.25	300	
HDI3216-R10K	0.10 \pm 10%	20	25	235	0.25	250	
HDI3216-R12K	0.12 \pm 10%	20	25	220	0.30	250	
HDI3216-R15K	0.15 \pm 10%	20	25	200	0.30	250	
HDI3216-R18K	0.18 \pm 10%	20	25	185	0.40	250	
HDI3216-R22K	0.22 \pm 10%	20	25	170	0.40	250	
HDI3216-R27K	0.27 \pm 10%	20	25	150	0.50	250	
HDI3216-R33K	0.33 \pm 10%	20	25	145	0.60	250	
HDI3216-R39K	0.39 \pm 10%	25	25	135	0.50	250	
HDI3216-R47K	0.47 \pm 10%	25	25	125	0.60	200	
HDI3216-R56K	0.56 \pm 10%	25	25	115	0.70	200	
HDI3216-R68K	0.68 \pm 10%	25	25	105	0.80	150	
HDI3216-R82K	0.82 \pm 10%	25	25	100	0.90	150	
HDI3216-1R0K	1.0 \pm 10%	45	10	75	0.40	100	
HDI3216-1R2K	1.2 \pm 10%	45	10	65	0.50	100	
HDI3216-1R5K	1.5 \pm 10%	45	10	60	0.50	50	
HDI3216-1R8K	1.8 \pm 10%	45	10	55	0.50	50	
HDI3216-2R2K	2.2 \pm 10%	45	10	50	0.60	50	
HDI3216-2R7K	2.7 \pm 10%	45	10	45	0.60	50	
HDI3216-3R3K	3.3 \pm 10%	45	10	41	0.70	50	
HDI3216-3R9K	3.9 \pm 10%	45	10	38	0.80	50	
HDI3216-4R7K	4.7 \pm 10%	45	10	35	0.90	50	
HDI3216-5R6K	5.6 \pm 10%	50	4	32	0.70	25	
HDI3216-6R8K	6.8 \pm 10%	50	4	29	0.80	25	
HDI3216-8R2K	8.2 \pm 10%	50	4	26	0.90	25	
HDI3216-100K	10 \pm 10%	50	2	24	1.00	25	
HDI3216-120K	12 \pm 10%	50	2	22	1.05	15	
HDI3216-150K	15 \pm 10%	35	1	19	0.70	5	
HDI3216-180K	18 \pm 10%	35	1	18	0.70	5	
HDI3216-220K	22 \pm 10%	35	1	16	0.90	5	
HDI3216-270K	27 \pm 10%	35	1	14	0.90	5	
HDI3216-330K	33 \pm 10%	35	1	13	1.05	5	
HDI3216-390K	39 \pm 10%	40	2	11	3.00	5	
HDI3216-470K	47 \pm 10%	40	2	10	3.40	5	



■ Packaging Quantity

Type	Pcs/Reel
1005/0402	10000PCS
1608/0603	4000PCS
2012/0805	4000PCS/2000PCS
3216/1206	4000PCS/2000PCS