

AEM's High Reliability Ferrite Chip Beads

Benefits

- Sole source and first ever Defense Supply Center Columbus (DSCC) approved ferrite chip bead (tested to Drawing 03024)
- Made in USA
- Sn/Pb terminations (5%+ Pb, no tin whisker worries)
- Designed and qualified as Hi-Rel
- Complete material and process traceability
- Meets all high reliability demands

Features

- Operating temperature range of -55°C to +125°C
- Tin whisker free (Sn/Pb or Au termination finish)
- Reliable terminations (Ni barrier)
- Groups A/B data are supplied with each shipment. Group C inspection is optional.
- Monolithic structure for closed magnetic path and high reliability
- Standard EIA/EIAJ chip sizes (0603, 0805, 1206)

Applications

- Mission critical
- Where replacement is not an option
- Where pure tin terminations are prohibited
- Down-hole and undersea

As the first and only DLA-approved ferrite chip bead designed for high reliability use, the HRB Series ferrite chip beads from AEM, Inc. are manufactured in a AS9100 facility in San Diego, CA, providing complete material and process traceability. All components are manufactured with qualified materials and process systems and tested to DSCC drawing 03024.

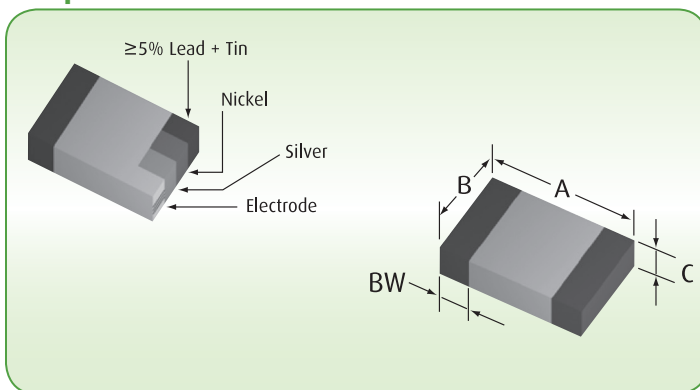
The HRB Series beads are designed with mission critical applications in mind. Capable of operating in harsh environments and extreme temperatures, these Hi-Rel chips are free of tin whiskers with Sn/Pb or Au terminations. A variety of EIA/EIAJ chip sizes are offered and feature nickel barrier terminations with a solder plate finish to help ensure a reliable solder joint.

AEM's High Reliability Ferrite Chip Beads

	AEM Part No.	DSCC Part No.	Impedance Ω	Max. Ω RDC	Max. Amps
0603	HRB0603S300P500 ..	03024-001P	30	0.15	0.50
	HRB0603S600P500 ..	03024-002P	60	0.15	0.50
	HRB0603S101P400 ..	03024-003P	100	0.20	0.40
	HRB0603S151P400 ..	03024-004P	150	0.25	0.40
	HRB0603S181P400 ..	03024-005P	180	0.25	0.40
	HRB0603S301P200 ..	03024-006P	300	0.30	0.20
	HRB0603S401P200 ..	03024-007P	400	0.35	0.20
	HRB0603S601P200 ..	03024-008P	600	0.40	0.20
	HRB0603S102P200 ..	03024-009P	1000	0.60	0.20
	HRB0805S300P4.00 ..	03024-010P	30	0.02	4.00
0805	HRB0805S500P2.00 ..	03024-011P	50	0.08	2.00
	HRB0805S600P1.50 ..	03024-012P	60	0.15	1.50
	HRB0805S700P1.50 ..	03024-013P	70	0.15	1.50
	HRB0805S101P1.00 ..	03024-014P	100	0.20	1.00
	HRB0805S121P1.00 ..	03024-015P	120	0.20	1.00
	HRB0805S151P1.00 ..	03024-016P	150	0.20	1.00
	HRB0805S221P1.00 ..	03024-017P	220	0.20	1.00
	HRB0805S331P1.00 ..	03024-018P	330	0.25	1.00
	HRB0805S471P1.00 ..	03024-019P	470	0.25	1.00
	HRB0805S601P1.00 ..	03024-020P	600	0.30	1.00
1206	HRB1206S300P4.00 ..	03024-022P	30	0.01	4.00
	HRB1206S500P3.00 ..	03024-023P	50	0.03	3.00
	HRB1206S800P1.50 ..	03024-024P	80	0.10	1.50
	HRB1206S121P1.50 ..	03024-025P	120	0.10	1.50
	HRB1206S251P1.50 ..	03024-026P	250	0.10	1.50
	HRB1206S501P1.00 ..	03024-027P	500	0.20	1.00
	HRB1206S601P1.00 ..	03024-028P	600	0.30	1.00

Other Sizes and Values may be added by request

Shape and Dimensions



Product Identification

HRB **0805** **S** **300** **P** **4.00** **F** **T** **(EM)**
(1) **(2)** **(3)** **(4)** **(5)** **(6)** **(7)** **(8)** **(9)**

- (1) Series code: High Reliability Ferrite Chip Bead
- (2) Chip size, EIA/EIAJ dimensions A x B
First 2 digits: A ("length") Last 2 digits: B ("width")
- (3) Speed code: S = Standard
- (4) Value code: Impedance (Ohms at 100 MHz)
The first two digits are significant. The last digit specifies zeros to follow 300 = 30 Ohms
- (5) Tolerance code: J = $\pm 5\%$; K = $\pm 10\%$; M = $\pm 20\%$; P = $\pm 25\%$
- (6) Current value in Ampere (4.00 = 4A; .150 = 0.15A)
- (7) Termination code: F = Sn/Pb solder plate; G = Au plate
- (8) Package Code: T = Tape & Reel; B = Bulk
- (9) Engineering Model (if applicable); no (EM) = Flight Model

Chip Size EIA / EIAJ	A Inch (mm)	B Inch (mm)	C Inch (mm)	TERMINATION (BW) Inch (mm)
0603/1608	0.063 $\pm$ 0.006 (1.60 $\pm$ 0.15)	0.031 $\pm$ 0.006 (0.80 $\pm$ 0.15)	0.031 $\pm$ 0.006 (0.80 $\pm$ 0.15)	0.014 $\pm$ 0.006 (0.36 $\pm$ 0.15)
0805/2012	0.079 $\pm$ 0.008 (2.00 $\pm$ 0.20)	0.049 $\pm$ 0.008 (1.25 $\pm$ 0.20)	0.035 $\pm$ 0.008 (0.90 $\pm$ 0.20)	0.020 $\pm$ 0.010 (0.51 $\pm$ 0.25)
1206/3216	0.126 $\pm$ 0.008 (3.20 $\pm$ 0.20)	0.063 $\pm$ 0.008 (1.60 $\pm$ 0.20)	0.043 $\pm$ 0.008 (1.10 $\pm$ 0.20)	0.020 $\pm$ 0.010 (0.51 $\pm$ 0.25)



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Mouser Electronics

Authorized Distributor

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HRB1206S601P1.00FT	HRB1206S500P3.00FT	HRB0805S601P1.00FT	HRB1206S251P1.50FT
HRB0603S101J.400FT	HRB0603S101K.400FT	HRB0603S101M.400FT	HRB0603S101P.400FT
HRB0603S102J.200FT	HRB0603S102K.200FT	HRB0603S102M.200FT	HRB0603S102P.200FT
HRB0603S151J.400FT	HRB0603S151K.400FT	HRB0603S151M.400FT	HRB0603S151P.400FT
HRB0603S181J.400FT	HRB0603S181K.400FT	HRB0603S181M.400FT	HRB0603S181P.400FT
HRB0603S300J.500FT	HRB0603S300K.500FT	HRB0603S300M.500FT	HRB0603S300P.500FT
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HRB0603S600J.500FT	HRB0603S600K.500FT	HRB0603S600M.500FT	HRB0603S600P.500FT
HRB0603S601K.200FT	HRB0603S601M.200FT	HRB0603S601P.200FT	HRB0805S101J1.00FT
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HRB0805S600K1.50FT	HRB0805S600M1.50FT	HRB0805S600P1.50FT	HRB0805S601J1.00FT
HRB0805S601K1.00FT	HRB0805S601M1.00FT	HRB0805S700J1.50FT	HRB0805S700K1.50FT
HRB0805S700M1.50FT	HRB0805S700P1.50FT	HRB1206S121J1.50FT	HRB1206S121K1.50FT
HRB1206S121M1.50FT	HRB1206S121P1.50FT	HRB1206S251J1.50FT	HRB1206S251K1.50FT
HRB1206S251M1.50FT	HRB1206S300J4.00FT	HRB1206S300K4.00FT	HRB1206S300M4.00FT
HRB1206S300P4.00FT	HRB1206S500J3.00FT	HRB1206S500K3.00FT	HRB1206S500M3.00FT