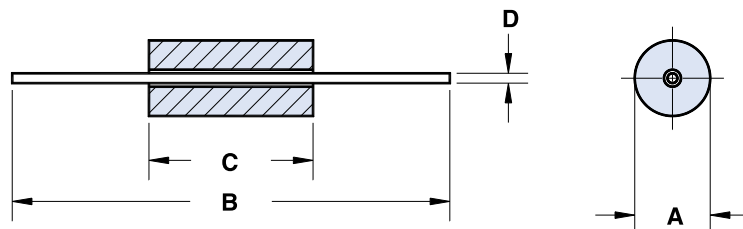


Beads on Leads

Beads are supplied assembled on tinned copper wire to aid automated circuit assembly.

- Parts with a "2" as the last digit of the part number are supplied taped and reeled per IEC 60286-1 and EIA Standard RS-296-F. Taped and reeled parts are supplied 4500 pieces on a 14" reel. Inside tape spacing is **52.4±1.5 mm**. These parts can also be supplied not taped and reeled and are then bulk packed. The last digit of bulk packaged part number is a "1".



- Wires are oxygen free high conductivity copper with a tin/lead coating. The resistance of the wire is 3.5 mΩ maximum for the 22 AWG wire and 2.2 mΩ maximum for the 20 AWG wire.
- Beads are controlled for impedance limits only. They are tested for impedance with a single turn, using a Hewlett Packard HP 4193A Vector Impedance Meter for beads in 73 and 43 material and the HP 4191A RF Impedance Analyzer for 61 material beads.
- Recommended storage and operating temperature is -55°C to 125°C.
- For impedance vs. frequency curves and DC bias curves for these parts, see Figures 1-30.
- For any bead on lead requirement not listed in the catalog, please contact our customer service group for availability and pricing.
- The Bead on Lead EMI Suppressor Kit (part number 0199000028) is available for prototype evaluation. See page 92.

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number*	A	B	C	D	Wt (g)	Typical Impedance(Ω) ¹				Z, R _s , X _L vs. Frequency Curve	DC Bias Curve
						10 MHz	25 MHz	100 MHz	250 MHz		
2773001112	3.5±0.25 .138	62.0±1.5 2.440	4.45±0.25 .175	0.65 22 AWG	.4	48	61	—	—	Figure 1A	Figure 1B
2743001112	3.5±0.25 .138	62.0±1.5 2.440	4.45±0.25 .175	0.65 22 AWG	.4	—	49	68	—	Figure 2A	Figure 2B
2761001112	3.5±0.25 .138	62.0±1.5 2.440	4.45±0.25 .175	0.65 22 AWG	.4	—	—	56	80	Figure 3A	Figure 3B
2773015112	3.5±0.25 .138	62.0±1.5 2.440	5.25±0.25 .206	0.65 22 AWG	.4	55	68	—	—	Figure 4A	Figure 4B
2743015112	3.5±0.25 .138	62.0±1.5 2.440	5.25±0.25 .206	0.65 22 AWG	.4	—	54	82	—	Figure 5A	Figure 5B
2761015112	3.5±0.25 .138	62.0±1.5 2.440	5.25±0.25 .206	0.65 22 AWG	.4	—	—	69	100	Figure 6A	Figure 6B
2773005112	3.5±0.25 .138	62.0±1.5 2.440	6.0±0.25 .236	0.65 22 AWG	.4	63	78	—	—	Figure 7A	Figure 7B
2743005112	3.5±0.25 .138	62.0±1.5 2.440	6.0±0.25 .236	0.65 22 AWG	.4	—	60	91	—	Figure 8A	Figure 8B
2761005112	3.5±0.25 .138	62.0±1.5 2.440	6.0±0.25 .236	0.65 22 AWG	.4	—	—	75	113	Figure 9A	Figure 9B
2773003112	3.5±0.25 .138	62.0±1.5 2.440	6.7±0.25 .263	0.65 22 AWG	.5	70	86	—	—	Figure 10A	Figure 10B

* Bold part numbers designate preferred parts.

¹Guaranteed Z Min is Z Typ -20%

Wound Beads



Figure 1-4

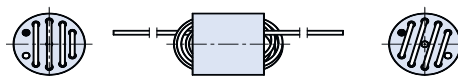


Figure 2-1

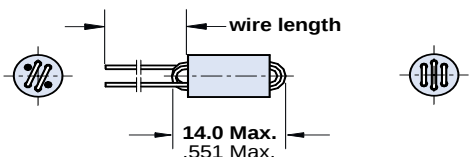


Figure 1-5

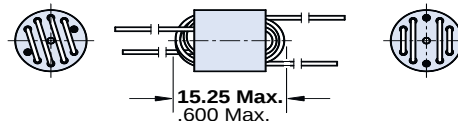


Figure 2-2

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number*	Fig.	A	B	C	D _{Ref}	Wt (g)	Typical Impedance (Ω) ¹			
							10 MHz	50 MHz	100 MHz	200 MHz
2644666611 ^①	1	6.0±0.25 .236	0.75±0.15 .032	10.0±0.25 .394	3.5 .138	1.2	213	400	470	—
2661666611 ^①	1	6.0±0.25 .236	0.75±0.15 .032	10.0±0.25 .394	3.5 .138	1.2	—	315	500	405
2644777711 ^②	2	10.0±0.25 .394	0.9±0.15 .038	10.0±0.25 .394	7.5 .295	3.3	375	905	500	—

① Tested with 1½ turns. ② Tested with 2½ turns. (A ½ turn is defined as a single pass through a hole.)

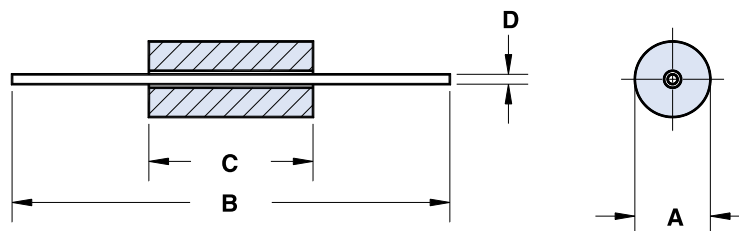
Part Number*	Fig.	Turns	Wire Size	Wire Length	Wt (g)	Typical Impedance (Ω) ¹				Z, R _s , X _L vs. Frequency Curve	DC Bias Curve
						10 MHz	50 MHz	100 MHz	200 MHz		
2944666661	1-1	1½	0.53 24 AWG	38.0±3.0 1.500	1.3	213	400	470	—	Figure 3A	Figure 3B
2961666661	1-1	1½	0.53 24 AWG	38.0±3.0 1.500	1.3	—	315	500	405	Figure 4A	Figure 4B
2944666651	1-2	2	0.53 24 AWG	38.0±3.0 1.500	1.3	300	650	600	—	Figure 5A	Figure 5B
2961666651	1-2	2	0.53 24 AWG	38.0±3.0 1.500	1.3	—	530	750	375	Figure 6A	Figure 6B
2944666671	1-3	2½	0.53 24 AWG	38.0±3.0 1.500	1.4	400	850	725	—	Figure 7A	Figure 7B
2961666671	1-3	2½	0.53 24 AWG	38.0±3.0 1.500	1.4	—	690	845	345	Figure 8A	Figure 8B
2944666681	1-4	2 x 1½	0.53 24 AWG	③	1.4	213	400	470	—	Figure 9A	Figure 9B
2961666681	1-4	2 x 1½	0.53 24 AWG	③	1.4	—	315	470	405	Figure 10A	Figure 10B
2944666631	1-5	3	0.53 24 AWG	38.0±3.0 1.500	1.4	500	1000	690	—	Figure 11A	Figure 11B
2961666631	1-5	3	0.53 24 AWG	38.0±3.0 1.500	1.4	—	815	780	315	Figure 12A	Figure 12B
2944777741	2-1	4½	0.65 22 AWG	38.0±3.0 1.500	3.8	815	1250	500	—	Figure 13A	Figure 13B
2944777721	2-2	2 x 2½	0.65 22 AWG	③	3.9	375	905	500	—	Figure 14A	Figure 14B

*Bold numbers designate preferred parts.

¹ Guaranteed Z Min is Z Typ -20%

③ Wire length of one winding is **38.0±3.0** (1.500). Wire length of second winding is **28.0±3.0** (1.125)

Beads on Leads



Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches.)

Part Number*	A	B	C	D	Wt (g)	Typical Impedance(Ω) ¹				Z, R _s , X _L vs. Frequency Curve	DC Bias Curve
						10 MHz	25 MHz	100 MHz	250 MHz		
2743003112	3.5±0.25 .138	62.0±1.5 2.440	6.7±0.25 .263	0.65 22 AWG	.5	—	65	100	—	Figure 11A	Figure 11B
2761003112	3.5±0.25 .138	62.0±1.5 2.440	6.7±0.25 .263	0.65 22 AWG	.5	—	—	88	125	Figure 12A	Figure 12B
2773004112	3.5±0.25 .138	62.0±1.5 2.440	7.6±0.3 .300	0.65 22 AWG	.5	80	100	—	—	Figure 13A	Figure 13B
2743004112	3.5±0.25 .138	62.0±1.5 2.440	7.6±0.3 .300	0.65 22 AWG	.5	—	75	110	—	Figure 14A	Figure 14B
2761004112	3.5±0.25 .138	62.0±1.5 2.440	7.6±0.3 .300	0.65 22 AWG	.5	—	—	94	144	Figure 15A	Figure 15B
2773002112	3.5±0.25 .138	62.0±1.5 2.440	8.9±0.3 .350	0.65 22 AWG	.6	94	115	—	—	Figure 16A	Figure 16B
2743002112	3.5±0.25 .138	62.0±1.5 2.440	8.9±0.3 .350	0.65 22 AWG	.6	—	88	133	—	Figure 17A	Figure 17B
2761002112	3.5±0.25 .138	62.0±1.5 2.440	8.9±0.3 .350	0.65 22 AWG	.6	—	—	113	168	Figure 18A	Figure 18B
2773007112	3.5±0.25 .138	62.0±1.5 2.440	9.5±0.3 .374	0.65 22 AWG	.6	110	115	—	—	Figure 19A	Figure 19B
2743007112	3.5±0.25 .138	62.0±1.5 2.440	9.5±0.3 .374	0.65 22 AWG	.6	—	96	150	—	Figure 20A	Figure 20B
2761007112	3.5±0.25 .138	62.0±1.5 2.440	9.5±0.3 .374	0.65 22 AWG	.6	—	—	125	180	Figure 21A	Figure 21B
2773008112	3.5±0.25 .138	62.0±1.5 2.440	11.4±0.4 .450	0.65 22 AWG	.7	125	145	—	—	Figure 22A	Figure 22B
2743008112	3.5±0.25 .138	62.0±1.5 2.440	11.4±0.4 .450	0.65 22 AWG	.7	—	116	180	—	Figure 23A	Figure 23B
2761008112	3.5±0.25 .138	62.0±1.5 2.440	11.4±0.4 .450	0.65 22 AWG	.7	—	—	144	213	Figure 24A	Figure 24B
2773009112	3.5±0.25 .138	62.0±1.5 2.440	13.8±0.5 .545	0.65 22 AWG	.8	151	170	—	—	Figure 25A	Figure 25B
2743009112	3.5±0.25 .138	62.0±1.5 2.440	13.8±0.5 .545	0.65 22 AWG	.8	—	143	220	—	Figure 26A	Figure 26B
2761009112	3.5±0.25 .138	62.0±1.5 2.440	13.8±0.5 .545	0.65 22 AWG	.8	—	—	175	258	Figure 27A	Figure 27B
2743012201+	9.8±0.3 .385	62.0±1.5 2.440	11.4±0.4 .449	0.8 20 AWG	4.5	—	193	271	—	Figure 28A	Figure 28B
2743013211+	9.8±0.3 .385	62.0±1.5 2.440	14.0±0.5 .550	0.8 20 AWG	5.5	—	235	331	—	Figure 29A	Figure 29B
2743014221+	9.8±0.3 .385	62.0±1.5 2.440	16.5±0.5 .650	0.8 20 AWG	6.5	—	280	391	—	Figure 30A	Figure 30B

* Bold part numbers designate preferred parts.

+ Not available taped and reeled.

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