



DJ Series • Low Cost Linear Storage Chokes

AlphaMag Electronics

DJ Series Storage Chokes offer high storage capacity in a compact, low cost design. Used primarily in switched-mode power supplies where low losses are essential at high pulse frequencies.

Features

- High storage capacity (to 5000μJoules) in compact size
- Low losses at high pulse frequencies
- Operating frequency to 100 kHz
- Low leakage
- Small mounting area due to vertical design
- Competitive pricing due to high volume production
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Fully RoHS compliant



Electrical Specifications at 25°C

Test frequency: Inductance measured @ 10kHz and 10mV

Test voltage between windings: 500Vrms

Operating temperature: -40°C to +125°C

Climatic category: IEC68-1 40/125/56



Part Number	Connection	I _{DC} Amps	L(μH) Typ. @ rated current	L _O (μH) ±15% no load	DCR (mOhm) Max.	Min. Energy Storage (μ Joule)	Wire Ø mm	Schematic	Weight per Piece
DJ-500	Series	1.5	372	600	212	419	0.56	1	18
	Parallel	3.0	93	150	53	419	0.56	1	18
DJ-501	Series	2.0	228	368	132	456	0.63	1	18
	Parallel	4.0	57	92	33	456	0.63	1	18
DJ-502	Series	2.5	140	224	80	431	0.71	1	18
	Parallel	5.0	35	56	20	431	0.71	1	18
DJ-503	Series	3.0	100	164	52	456	0.80	1	18
	Parallel	6.0	25	41	13	456	0.80	1	18
DJ-504	Series	4.6	44	72	24	477	1.00	1	19
	Parallel	9.2	11	18	6	477	1.00	1	19
DJ-1500	Series	2.0	752	1,428	180	1,501	0.80	1	56
	Parallel	4.0	188	357	45	1,501	0.80	1	56
DJ1501	Series	2.5	468	892	124	1,465	0.85	1	54
	Parallel	5.0	117	223	31	1,465	0.85	1	54
DJ-1502	Series	3.0	328	624	76	1,477	1.00	1	57
	Parallel	6.0	82	156	19	1,477	1.00	1	57
DJ-1503	Series	4.0	188	356	44	1,501	1.12	1	56
	Parallel	8.0	47	89	11	1,501	1.12	1	56
DJ-1504	Series	6.0	80	148	20	1,406	1.00	2	56
	Parallel	12.0	20	37	5	1,406	1.00	2	56
DJ-1505	Series	7.5	48	96	12	1,406	1.12	2	56
	Parallel	15.0	12	24	3	1,406	1.12	2	56
DJ-2500	Series	2.8	628	1,292	176	2,458	0.80	1	63
	Parallel	5.6	157	323	44	2,458	0.80	1	63
DJ-2501	Series	3.5	404	832	112	2,482	0.90	1	63
	Parallel	7.0	101	208	28	2,482	0.90	1	63
DJ-2502	Series	4.5	248	508	72	2,499	1.0	1	63
	Parallel	9.0	62	127	18	2,499	1.00	1	63
DJ-2503	Series	6.0	140	284	40	2,499	1.12	1	63
	Parallel	12.0	35	71	10	2,499	1.12	1	63
DJ-2504	Series	8.5	68	144	20	2,517	1.00	2	63
	Parallel	17.0	17	36	5	2,517	1.00	2	63
DJ-2505	Series	10.5	48	96	12	2,604	1.12	2	64
	Parallel	21.0	12	24	3	2,604	1.12	2	64

Notes: The μJoule rating ($\frac{1}{2}LI^2$) is the ability of the inductor to store energy.

DJA Series • High Capacity Linear Storage Chokes

Storage capacity $\frac{1}{2} LI^2 \approx 3500$ & $5000 \mu\text{Ws}$ ($\mu\text{ Joule}$)

The DJA Series utilizes Fe-based amorphous alloy cores which provide high flux density and low core loss. These storage chokes allow you to optimize your designs by giving a highly stable inductance over a wide DC bias current range at operating frequencies to 500 kHz.

Part Number	Connection	I _{DC} Amps	L (μH) Typ. @ rated current	L _O (μH) ±15% no load	DCR (mOhm) Max.	Min. Energy Storage (μ Joule)	Wire Ø mm	Schematic	Weight per Piece
DJA-3500	Series	3.3	624	780	128	3,392	0.80	1	33
	Parallel	6.6	156	195	32	3,392	0.80	1	33
DJA-3501	Series	4.0	420	524	92	3,355	0.85	1	33
	Parallel	8.0	105	131	23	3,355	0.85	1	33
DJA-3502	Series	5.3	236	296	48	3,314	1.00	1	33
	Parallel	10.6	59	74	12	3,314	1.00	1	33
DJA-3503	Series	6.7	148	184	32	3,319	1.12	1	33
	Parallel	13.4	37	46	8	3,319	1.12	1	33
DJA-3504	Series	9.8	68	88	16	3,324	0.95	2	33
	Parallel	19.6	17	22	4	3,324	0.95	2	33
DJA-3505	Series	11.6	50	62	12	3,335	1.06	2	33
	Parallel	23.2	12.5	15.5	3	3,335	1.06	2	33
DJA-5000	Series	4.0	636	792	124	5,079	0.85	1	44
	Parallel	8.0	159	198	31	5,079	0.85	1	44
DJA-5001	Series	5.0	408	508	80	5,079	0.95	1	44
	Parallel	10.0	102	127	20	5,079	0.95	1	44
DJA-5002	Series	6.4	248	312	44	5,079	1.12	1	44
	Parallel	12.8	62	78	11	5,079	1.12	1	44
DJA-5003	Series	8.4	144	180	26	5,054	0.90	2	44
	Parallel	16.8	36	45	6.5	5,054	0.90	2	44
DJA-5004	Series	12.3	68	84	12	5,073	1.06	2	44
	Parallel	24.6	17	21	3	5,073	1.06	2	44
DJA-5005	Series	14.5	48	60	10	5,047	1.12	2	44
	Parallel	29.0	12	15	2.5	5,047	1.12	2	44

Dimensions

