QUALITY COILS SINCE 1946

CADDELL-BURNS

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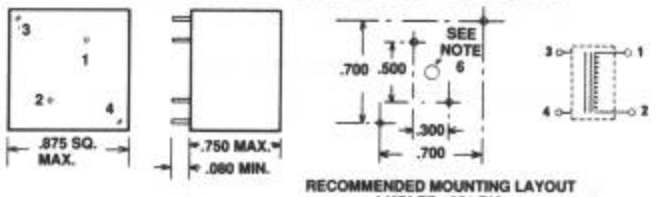
SHIELDED HIGH CURRENT CHOKES

TYPE 6900 10µH - 82µH — 10% Tolerance.
100µH - 1.0H — 5% Tolerance.



RECOMMENDED MOUNTING LAYOUT
4 HOLES .051 DIA.

SPECIAL FEATURES

- **Shielded** — Magnetically shielded with ground lugs to minimize external field.
- **Encapsulated** — with epoxy for maximum ruggedness and moisture protection.
- **Variable** — with optional trimmer. See note 6.
- **Stable** — typical temperature coefficient on +76 ±28 ppm/°C from –30° to +70°C.

NOTES:

1. Inductance measured on QuadTech/GenRad 1659 RLC Digibridge at 1.0 KHz.
2. Current rating (Rated IDC) is based on 1.0 watt power dissipation for approximately 20°C temperature rise. Depending on the application, these units may be operated at up to twice the rated current.
3. Incremental current (INCR I) is the minimum current at which the inductance will be decreased by 5% from its initial (zero – DC) value.
4. Dielectric Withstanding Voltage – 1000 VRMS.
5. Operating temperature range –55°C to +105°C.
6. These units are available with an optional trimmer which, when full inserted, will increase the inductance by at least 20%. Order by adding suffix "V" to dash numbers, e.g.: 6900 -25V is continuously variable from 1.0 mH ±5% to 1.2 mH +10% –5%. If bottom access to trimmer is desired, provide a ¼" dia. center hole as shown in the recommended mounting layout.
7. Materials:
   Core – Ferrite. Case – Epoxy encapsulated.
   Magnet Wire – Per FED SPEC. J-W-001177/9
   Terminals (1-2) – -01 thru -08 #18 AWG TINNED COPPER
   -09 thru -14 #20 AWG TINNED COPPER
   -15 and -16 #21 AWG TINNED COPPER
   -17 #22 AWG TINNED COPPER
   -18 thru -61 .024 dia. TINNED PH. BRONZE
   Ground Lugs (3-4) – .016 x .028 STEEL, NICKEL PLATE WITH GOLD FLASH.
8. Marking – Rubber stamped with Caddell-Burns part number.

STANDARD VALUES: (Other values available on special order)

Part No.	Nominal Inductance	Max. DCR Ohms	Min. SRF MHz	Rated IDC ma	INCR I ma
6900-01	10 µH	.010	19	10,000	10,500
6900-02	12	.011	13	9,500	9,500
6900-03	15	.012	8.0	9,100	8,000
6900-04	18	.013	6.6	8,700	7,400
6900-05	22	.014	5.3	8,400	6,900
6900-06	27	.016	4.9	7,900	6,000
6900-07	33	.018	4.5	7,400	5,400
6900-08	39	.020	4.0	7,000	5,100
6900-09	47	.031	3.6	5,700	4,600
6900-10	56	.034	3.4	5,400	4,200
6900-11	68	.040	3.2	5,000	3,800
6900-12	82	.042	2.9	4,900	3,500
6900-13	100	.047	2.7	4,600	3,200
6900-14	120	.053	2.4	4,300	2,900
6900-15	150	.071	2.1	3,800	2,600
6900-16	180	.080	1.9	3,500	2,300
6900-17	220	.11	1.7	3,000	2,100
6900-18	270	.15	1.5	2,600	1,900
6900-19	330	.17	1.4	2,400	1,700
6900-20	390	.19	1.2	2,300	1,600
6900-21	470	.24	1.1	2,000	1,500
6900-22	560	.28	.90	1,900	1,300
6900-23	680	.31	.80	1,800	1,200
6900-24	820	.34	.70	1,700	1,100
6900-25	1.0 mH	.46	.61	1,500	1,000
6900-26	1.2	.52	.57	1,400	910
6900-27	1.5	.72	.54	1,200	820
6900-28	1.8	.79	.52	1,100	740
6900-29	2.2	.89	.50	1,000	670
6900-30	2.7	1.2	.44	900	610

Part No.	Nominal Inductance	Max. DCR Ohms	Min. SRF MHz	Rated IDC ma	INCR I ma
6900-31	3.3 mH	1.3	.38	880	550
6900-32	3.9	1.9	.35	730	510
6900-33	4.7	2.1	.32	690	460
6900-34	5.6	2.6	.29	620	420
6900-35	6.8	3.1	.26	570	380
6900-36	8.2	3.4	.23	540	350
6900-37	10	4.6	.20	470	310
6900-38	12	5.1	.18	440	290
6900-39	15	5.8	.17	420	260
6900-40	18	7.8	.16	360	240
6900-41	22	9.0	.15	330	210
6900-42	27	12	.13	290	190
6900-43	33	13	.12	280	170
6900-44	39	18	.11	240	160
6900-45	47	20	.10	220	150
6900-46	56	27	.085	190	130
6900-47	68	31	.070	180	120
6900-48	82	34	.065	170	110
6900-49	100	45	.060	150	100
6900-50	120	51	.055	140	91
6900-51	150	58	.050	130	82
6900-52	180	77	.045	110	75
6900-53	220	88	.040	105	67
6900-54	270	120	.036	91	61
6900-55	330	130	.032	88	55
6900-56	390	150	.030	82	51
6900-57	470	200	.028	71	46
6900-58	560	280	.026	60	42
6900-59	680	310	.024	57	38
6900-60	820	350	.020	53	35
6900-61	1.0 H	470	.016	46	31

TYPICAL Q CURVES (TYPE 6900)