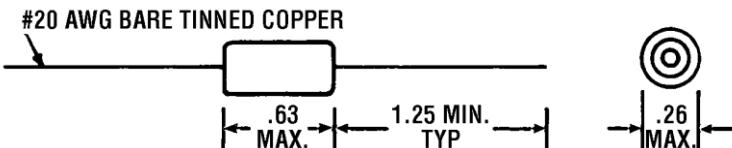




## MINIATURE HIGH CURRENT CHOKES

TYPE 7300 10 $\mu$ H-10mH 10% Tolerance

Recommended Mounting Pitch—.80"



### NOTES:

1. INDUCTANCE measured on QuadTech/GenRad 1659 RLC DigiBridge at 1.0 KHz.
2. CURRENT RATING (Rated IDC) is based on 0.25 watt power dissipation ( $I^2R$ ) for an approximate 20°C temperature rise. Depending on the application, these units may be operated at higher currents.

The core material for the 7300 series has been chosen for optimum current handling capability. Because this material has a relatively low volume resistivity, the core will appear as a shunt resistance on the order of 1 Kilohm, which may have to be taken into account when determining total power dissipation; e.g., if the induced voltage ( $2\pi fLI$ ) across the coil is 10 volts, there will be a  $V^2/R$  loss on the order of 0.10 watt, in addition to the  $I^2R$  losses associated with the winding. This is not usually a factor unless the choke is operated at high levels of R.F. excitation.

STANDARD VALUES: (Other values are available on special order.)

Part No.	Nominal Inductance	DCR $\pm 20\%$ Ohms	Min. SRF MHz	Rated IDC Amps	INCR I Amps
7300-01	10 $\mu$ H	0.055	9.0	2.1	2.8
7300-02	12	0.061	8.0	2.0	2.6
7300-03	15	0.069	7.0	1.9	2.2
7300-04	18	0.077	6.2	1.8	2.1
7300-05	22	0.084	5.6	1.7	1.9
7300-06	27	0.093	5.0	1.6	1.7
7300-07	33	0.11	4.4	1.5	1.5
7300-08	39	0.12	3.8	1.4	1.4
7300-09	47	0.13	3.4	1.4	1.3
7300-10	56	0.14	3.0	1.3	1.2
7300-11	68	0.15	2.7	1.3	1.1
7300-12	82	0.17	2.4	1.2	0.98
7300-13	100	0.27	2.1	0.96	0.89
7300-14	120	0.31	1.9	0.90	0.80
7300-15	150	0.36	1.7	0.83	0.72
7300-16	180	0.39	1.5	0.80	0.66
7300-17	220	0.45	1.3	0.75	0.58
7300-18	270	0.49	1.2	0.71	0.54
7300-19	330	0.58	1.0	0.66	0.47

3. INCREMENTAL CURRENT (INCR I) is the approximate current at which the inductance will be decreased by 5% from its initial (zero-DC) value because of saturation. If the current is increased beyond INCR I, the inductance will continue to decrease as shown by the saturation curve below.

4. DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS.

5. OPERATING TEMPERATURE RANGE: -55° to +105°C.

6. MARKING: Printed with Caddell-Burns Part Number.

7. MATERIALS:

Coil Form: Ferrite

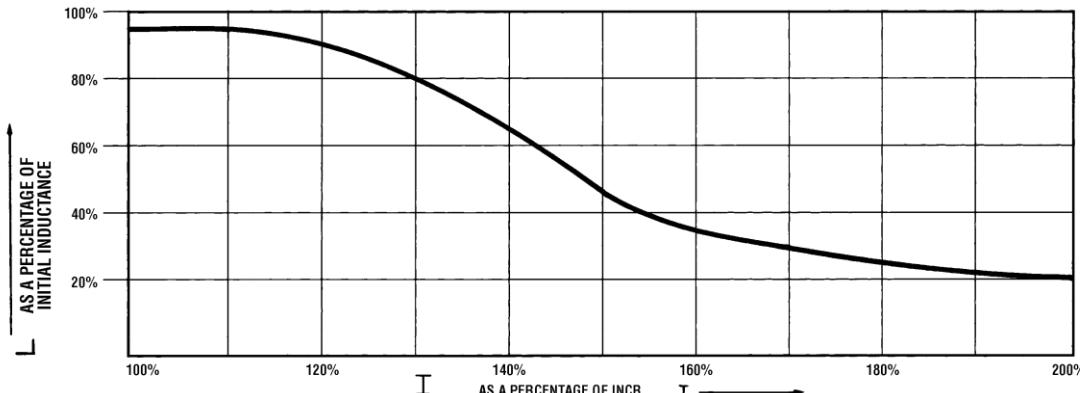
Magnet Wire: Per FED SPEC J-W-001177/9

Jacket: Per MIL-I-23053/5, Class 1.

Flame Retardant IAW UL 224, Class 1.

Part No.	Nominal Inductance	DCR $\pm 20\%$ Ohms	Min. SRF MHz	Rated IDC Amps	INCR I Amps
7300-20	390 $\mu$ H	0.64	0.90	0.63	0.43
7300-21	470	0.86	0.80	0.54	0.39
7300-22	560	0.93	0.72	0.52	0.37
7300-23	680	1.1	0.64	0.48	0.33
7300-24	820	1.5	0.56	0.41	0.30
7300-25	1.0 mH	2.0	0.50	0.35	0.27
7300-26	1.2	2.2	0.44	0.34	0.25
7300-27	1.5	3.0	0.40	0.29	0.22
7300-28	1.8	3.4	0.35	0.27	0.20
7300-29	2.2	3.8	0.32	0.26	0.18
7300-30	2.7	4.4	0.28	0.24	0.16
7300-31	3.3	5.9	0.25	0.21	0.15
7300-32	3.9	7.9	0.22	0.18	0.14
7300-33	4.7	8.9	0.19	0.17	0.12
7300-34	5.6	12	0.17	0.14	0.11
7300-35	6.8	13	0.15	0.14	0.10
7300-36	8.2	14	0.14	0.13	0.094
7300-37	10	17	0.12	0.12	0.084

TYPE 7300 TYPICAL SATURATION CURVE



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