

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

E 1010406

REVISIONS B 00803 4-10-63			
SYM	DESCRIPTION	DATE	APPROVAL
-			
A	UPGRADED TO CLASS A ^{TRAP} 00852	24 APR 63	WRL
B	REVISED PER TDRR 02594	14 May 63	WR
C	REVISED PER TDRR 02921	5 Sep 63	WRL
D	REVISED PER TDRR 07844	11/21/64	WRL
E	REVISED PER TDRR 15574	2/2/65	WRL

REQUIREMENTS:

1. GENERAL:

- A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- B. UNITS SHALL BE CAPABLE OF MEETING THE REQUIREMENTS OF MIL-C-15305, GRADE 1, CLASS B, EXCEPT AS AND IN ADDITION TO THE REQUIREMENTS SPECIFIED HEREIN. QUALIFICATION APPROVAL AND GROUP B AND C TESTS ARE NOT APPLICABLE.
- C. THE SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS AS CONTAINED IN ND 1015404, CLASS 2.
- D. UNITS SHALL BE CAPABLE OF MEETING THE REQUIREMENTS OF MIL-C-15305
- E. PRESERVATION, PACKAGING, PACKING AND CONTAINER MARKING PER ND 1002215, CLASS 1, CODE 1.

2. ACCEPTANCE AND INSPECTION:

- A. LEAD DATA: SHALL BE GOLD PLATED DUMET PER ND 1015401. A CERTIFICATE OF COMPLIANCE WITH THIS REQUIREMENT SHALL ACCOMPANY EACH SHIPMENT.
- B. ELECTRICAL CHARACTERISTICS: PER TABLE I.
INDUCTANCE, L_{eff} (+25°C)
RESISTANCE, R_{DC} (STABILIZE FOR 24 HOURS BEFORE MAKING READING.)
- C. DIELECTRIC VOLTAGE (SEA LEVEL): 1400 VOLTS RMS. 70,000 FEET: 360 VOLTS RMS.
- D. MINIMUM MARKING: UNITS SHALL BE MARKED PERMANENTLY AND LEGIBLY WITH THE LAST THREE DIGITS OF THE DRAWING NUMBER AND APPLICABLE DASH NUMBER, REVISION LETTER, SERIAL NUMBER AND/OR LOT CODE NUMBER. MANUFACTURER'S PART OR TYPE NUMBER MAY APPEAR ON PART AND PACKAGE.

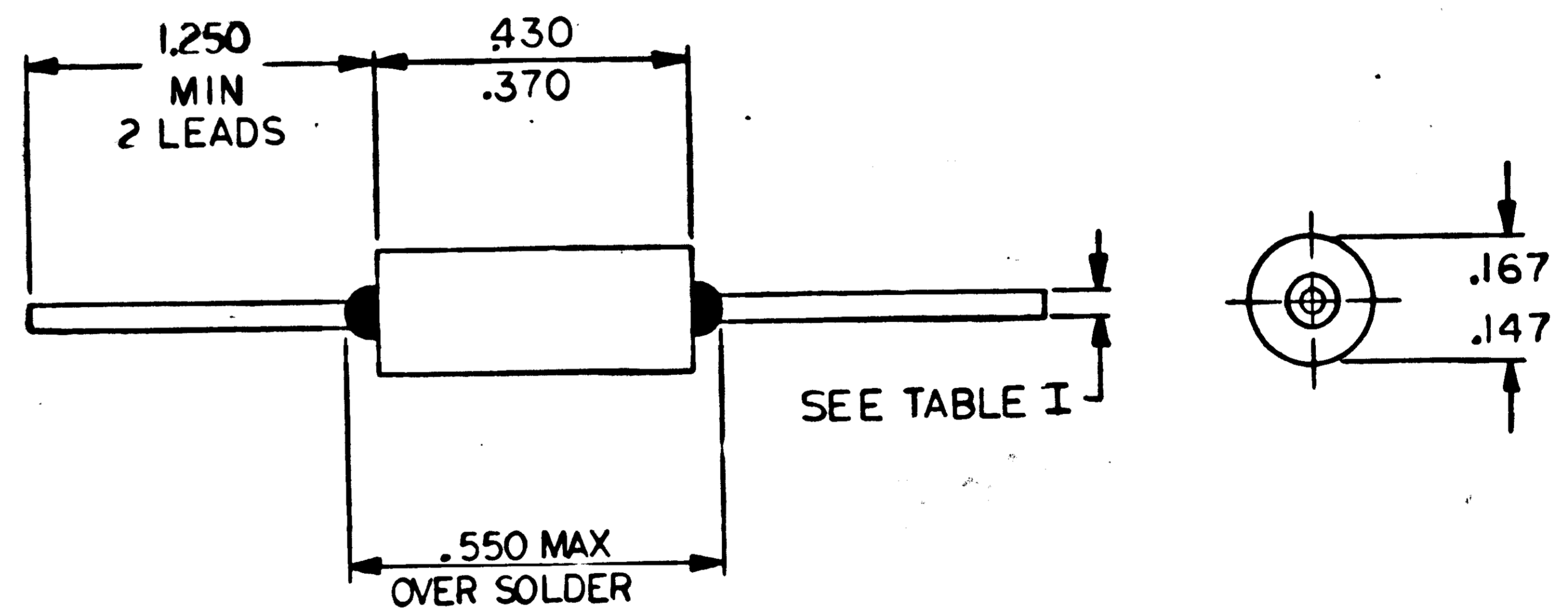
3. DESIGN:

- A. AMBIENT TEMPERATURE: +90°C MAXIMUM.
- B. WORKING VOLTAGE: 500 VOLTS MAXIMUM.
- C. INDUCTANCE, EFFECTIVE (-55°C TO +125°C): PER TABLE I, EXCEPT TOTAL TOLERANCE SHALL BE ± 15 PERCENT.
- D. ALTITUDE: 70,000 FEET.
- E. LEAD PULL: FIVE (5) POUNDS, MINIMUM.

4. SPECIAL CONDITIONING (BY SUPPLIER):

- A. ALL COILS SHALL BE BURNED IN FOR 50 HOURS AT I_{DC} = RATED (SEE TABLE I) AT AN AMBIENT TEMPERATURE OF +90°C. INDUCTANCE CHANGE AT CONCLUSION OF BURN-IN SHALL NOT EXCEED INITIAL TOLERANCE, AFTER 24 HOUR WAITING PERIOD.
- B. ALL COILS SHALL BE TEMPERATURE CYCLED THROUGH 5 CYCLES WITH NOT MORE THAN A 20 MINUTE TRANSFER TIME AS FOLLOWS: 20 MINUTES AT -55°C
20 MINUTES AT +125°C

INDUCTANCE AND Q CHANGES AT CONCLUSION OF TEMPERATURE CYCLING SHALL NOT EXCEED INITIAL TOLERANCE AFTER A 24 HOUR STABILIZATION PERIOD.



PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING.

MIL-STD-883C

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
		TOLERANCES ON
		FRACTIONS DECIMALS ANGLES
		± ± ±
		DO NOT SCALE THIS DRAWING
		MATERIAL
		SEE NOTES
		HEAT TREATMENT
		NONE
		FINAL FINISH
		NONE
NEXT ASSY	USED ON	
APPLICATION		

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
COIL, RF, CHOKE			
SPECIFICATION CONTROL DRAWING			
NASA APPROVAL <i>[Signature]</i>		CODE IDENT NO. C	NASA DRAWING NO. 1010406
MIT APPROVAL <i>[Signature]</i>		SCALE NONE	WT SHEET 1 OF 2

1010406 EA

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TABLE I

ELECTRICAL CHARACTERISTICS AT +25°C, UNLESS OTHERWISE SPECIFIED

DASH NUMBER	Leff	Qeff	f	f ₀	C _d	R _p		R _p		R _{DC}	I _{DC} **	I _{DC} *	LEAD DIA
	± 10%	MIN		MIN	± 20%	MIN	MIN	MIN	MIN	MAX	MAX	(INCR.)	
	uH	—	mc	mc	pf	k Ω	mc	k Ω	mc	Ω	mA	mA	
-1	100,000	14.4	.079	0.11	12.2	918	0.060	1140	0.14	678.0	13	2.5	.026 .024
-2	68,000	18.4	.079	0.13	13.2	675	0.079	1020	0.16	580.0	16	3.0	
-3	47,000	18.4	.079	0.16	13.5	623	0.10	980	0.20	473.0	19	3.2	
-4	33,000	21.6	.079	0.19	13.3	780	0.15	850	0.24	343.0	21	3.7	
-5	22,000	21.6	.079	0.25	11.6	536	0.15	710	0.31	274.0	24	5.0	
-6	100	41.6	2.5	10.00	1.7	62	5	44	12.5	3.5	168	60	
-7	8.2	40.0	7.9	50.00	.78	45	20	48	57.0	1.32	344	180	
-8	1.0	37.6	25.0	140.00	.84	13	75	12	164.0	.070	1200	630	
-9	1.5	36.0	7.9	115.00	.83	17	50	17	135.0	.12	1000	530	
-10	2.2	36.0	7.9	100.00	.73	21	40	25	112.0	.19	820	430	
-11	3.9	35.2	7.9	75.00	.73	33	30	32	84.0	.40	590	310	
-12	22.0	36.8	2.5	41.00	.48	9	15	10	52.0	.96	319	125	
-13	33.0	36.0	2.5	34.00	.48	14	12	13	40.0	1.37	277	100	
-14	47.0	41.6	2.5	27.00	.48	19	12	16	34.0	2.11	218	85	
-15	0.47	35.2	25	235.00	.67	27	100	35	230.	0.1	1000	1000	.021 .019
-16	0.39	35.2	25	255.00	.67	23	100	34	230.	.085	1100	1100	
-17	0.33	36.8	25	280.00	.67	19	100	33	230.	.075	1300	1300	
-18	0.27	37.6	25	290.00	.67	16	100	31	230.	.045	1500	1500	

* CURRENT TO CAUSE FIVE PERCENT REDUCTION IN INDUCTANCE.
** DERATE LINEARLY FROM +90°C TO +125°C.

MASTER

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED TO CLASS A TDRR 00952	24 APR 63	WJL
B	REVISED PER TDRR 02594	14 JUN 63	WJL
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DRAWN <i>R. Kane</i> DATE 5 MAR 63		COIL, RF, CHOKE SPECIFICATION CONTROL DRAWING	
CHECKED <i>A. Wilson</i> 20 MAR 63			
APPROVAL <i>[Signature]</i> 4/9/63		NASA DRAWING NO. 1010406	
NASA APPROVAL <i>[Signature]</i> 4/10/63		CODE IDENT NO.	SIZE C
MIT APPROVAL <i>[Signature]</i> 10 APR 63		SCALE NONE	WT
APPLICATION		SHEET 2 OF 2	

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