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.

— 1006330

REVISIONS						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-		INITIAL RELEASE CLASS A PER TDRR 18487			4-21-65	

REQUIREMENTS:

1. GENERAL:

A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

B. RESISTORS SHALL MEET THE REQUIREMENTS OF MIL-R-23379 TYPE RWP22, CHARACTERISTIC F WITH THE EXCEPTIONS AND ADDITIONS SPECIFIED HEREIN.

C. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS AS CONTAINED IN ND 1015404, CLASS 2.

D. RESISTORS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS OF ND 1002057.

E. MARKING: RESISTORS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE NASA PART NUMBER (DRAWING NUMBER, REVISION LETTER, AND DASH NUMBER), RESISTANCE VALUE, TOLERANCE, POWER RATING

F. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215 CLASS I, CODE 2.

(1) SHIPPING CONTAINERS SHALL BE MARKED IN ACCORDANCE WITH THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND THE METHODS OF MARKING AS SPECIFIED IN ND 1002215.

2. ACCEPTANCE AND INSPECTION: SAMPLE

A. ELECTRICAL CHARACTERISTICS:

(1) RESISTANCE AND TOLERANCE AS SPECIFIED IN TABULATION.

(2) TEMPERATURE COEFFICIENT: ±100 PARTS PER MILLION PER DEGREE CENTIGRADE OVER THE RANGE FROM MINUS 65°C TO PLUS 275°C.

B. VENDOR SUPPLIED DATA: THE VENDOR SHALL SUPPLY THE FOLLOWING DOCUMENTATION WITH EACH SHIPMENT.

(1) A CERTIFICATE OF COMPLIANCE WITH ALL THE REQUIREMENTS OF THIS DRAWING.

(2) DATA REQUIREMENTS OF PARAGRAPH 4 SPECIFIED HEREIN.

(3) CERTIFICATES OF COMPLIANCE SHALL CONTAIN THE FOLLOWING INFORMATION PURCHASE ORDER NUMBER, PART NUMBER (DRAWING NUMBER, REVISION LETTER AND DASH NUMBER) QUANTITY AND DATE OF SHIPMENT.

3. DESIGN:

A. LEAD MATERIAL: TINNED COPPER. A CERTIFICATE OF COMPLIANCE OF LEAD MATERIAL AND FINISH SHALL ACCOMPANY EACH LOT SHIPPED.

B. POWER RATING: 10 WATTS AT 25°C DERATED LINEARLY TO ZERO AT 275°C.

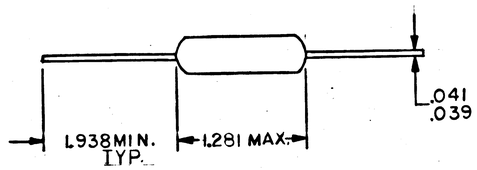
DASH NO.	RESISTANCE OHMS	TOLERANCE
-001	0.120	± 1%

4. SPECIAL CONDITIONING BY SUPPLIER:

A. TEMPERATURE CYCLING:
RESISTORS SHALL BE TEMPERATURE CYCLED PER MIL-STD-202, METHOD 102 CONDITION C. RESISTANCE SHALL BE MEASURED AT 25°C BEFORE TEMPERATURE CYCLING. RESISTANCE SHALL BE MEASURED AT 25°C NOT LESS THAN ONE HOUR BUT WITHIN A 24 HOUR PERIOD AFTER THE LAST CYCLE. RESISTORS SHALL SHOW NO EVIDENCE OF MECHANICAL DAMAGE, NOR SHALL THERE BE ANY EVIDENCE OF CHANGE IN RESISTOR COATING, ENCLOSURE OR OTHER PARTS WHICH WILL RESULT IN DEGRADATION OF PERFORMANCE. AS A RESULT OF THIS TEST THERE SHALL BE NO CHANGE IN RESISTANCE IN EXCESS OF 0.5 PERCENT PLUS 0.05 OHM.

B. BURN IN:
RESISTORS SHALL BE BURNED IN AT 25°C FOR 100 HOURS AT RATED POWER BY THE MANUFACTURER PRIOR TO SHIPMENT. RESISTANCE SHALL BE MEASURED AT 25°C BEFORE BURN IN. RESISTANCE SHALL BE MEASURED AT 25°C NOT LESS THAN ONE HOUR BUT WITHIN A 24 HOUR PERIOD AFTER BURN IN. UNITS EXHIBITING A VARIATION OF RESISTANCE IN EXCESS OF ±0.5% OR CHANGE OUTSIDE OF SPECIFIED TOLERANCE SHALL BE REJECTED.

C. DATA REQUIREMENTS: THE VENDOR MUST FURNISH THE FOLLOWING DATA WITH EACH SHIPMENT FOR EACH RESISTOR: RESISTANCE MEASUREMENTS, DATA CONCERNING ANY CATASTROPHIC FAILURE OCCURRING DURING CONDITIONING, NUMBER BURNED IN, NUMBER OF FAILURES INCLUDING APPROXIMATE HOURS BEFORE FAILING AND INDICATION OF TYPE OF FAILURE



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

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	B Katsuba	11 FEB 65
CHECKED	Unger	11 Feb 65
APPROVED		
APPROVED	Edwin C Hall	15 Feb 65
APPROVED MIT	W Ruffer	21 Apr 65
APPROVED NASA	W Rhine	4-21-65
DATE		

RESISTORS, FIXED, WIREWOUND
PRECISION, POWERTYPE
SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1006330

SCALE NONE — SHEET 1 OF 1