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1006329

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE CLASS A PER TDRR	17476	18 Mar 65 W/L

REQUIREMENTS:

1. GENERAL:

- A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- B. UNITS SHALL MEET THE GENERAL SPECIFICATION REQUIREMENTS OF MIL-S-19500 EXCEPT AS MODIFIED HEREIN.
- C. SUPPLIERS SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS OF ND 1015404, CLASS 2.
- D. THE PARTS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS OF ND 1002051.
- E. PART MARKING: UNITS SHALL BE MARKED, IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, TYPE DESIGNATION, LOT CODE, AND NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). POLARITY SHALL ALSO BE MARKED.
- F. PREPARATION FOR DELIVERY: UNIT PACKAGING AND PACKING SHALL BE IN ACCORDANCE WITH MIL-P-19491, LEVEL A. UNITS SHALL NOT BE PACKED IN ANY MANNER WHICH MAY CAUSE DAMAGE TO LEADS. PACKAGE MARKING SHALL BE IN ACCORDANCE WITH ND 1002215.

2. INSPECTION AND ACCEPTANCE:

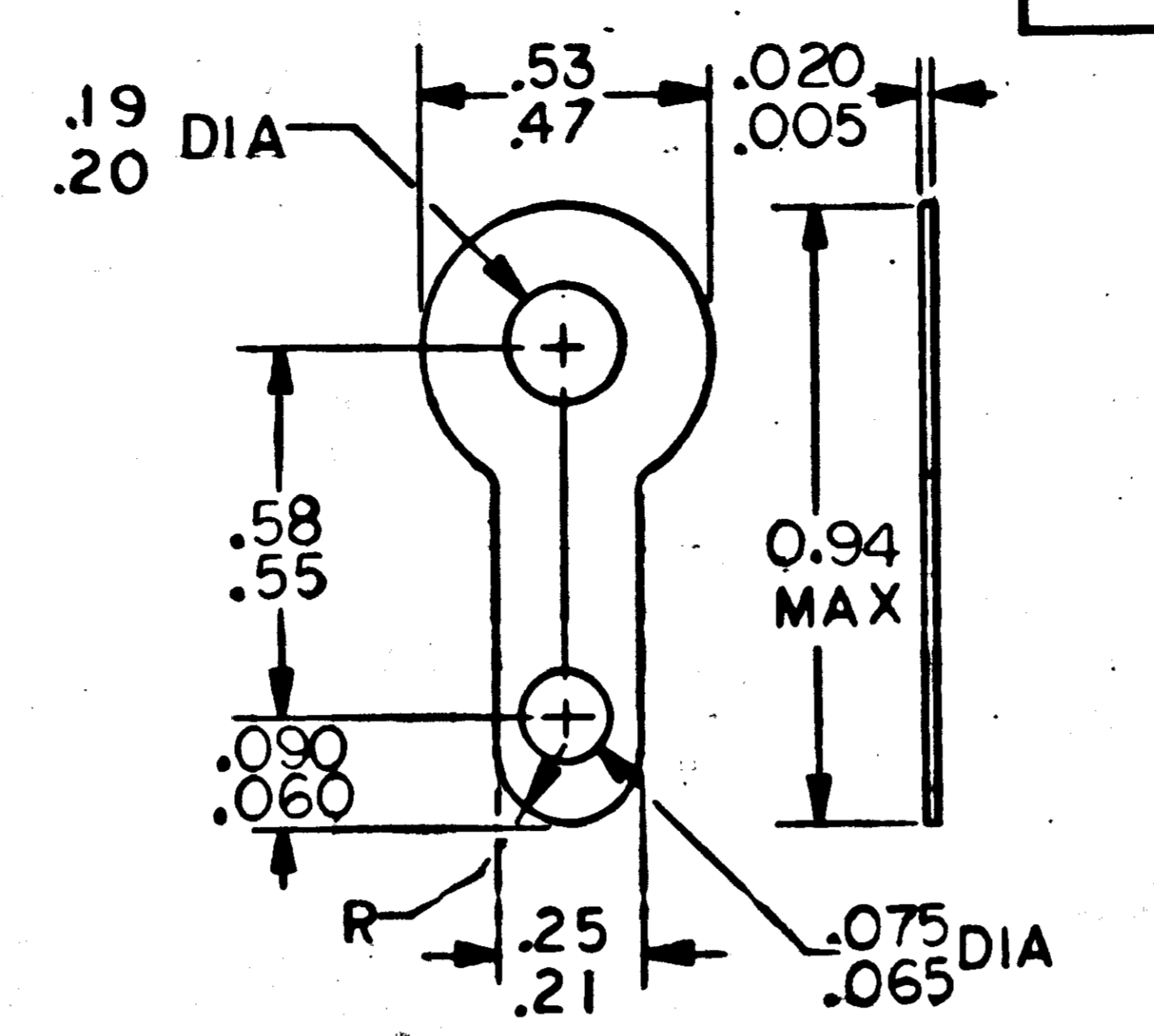
- A. MECHANICAL REQUIREMENTS:
 - (1) DIMENSIONS: AS DELINEATED HEREIN.
 - (2) TERMINAL: LEAD SHALL BE ALLOY NO. 52 SOLDER BIPPED.
 - (3) MARKING: AS SPECIFIED HEREIN.
- B. ELECTRICAL CHARACTERISTICS: PER TABLE I.
 - (1) REVERSE CURRENT (I_R)
 - (2) FORWARD VOLTAGE (V_F)
 - (3) RECOVERY TIME (T_{RR})
 - (4) MAXIMUM OVERSHOOT (I_{OS})
 - (5) REVERSE BREAKDOWN (P_{IV})
- C. VENDOR SUPPLIED DATA: EACH SHIPMENT OF PARTS SHALL BE ACCOMPANIED BY THE FOLLOWING DATA:
 - (1) CERTIFICATE OF COMPLIANCE WITH LEAD MATERIAL.

3. DESIGN REQUIREMENTS:

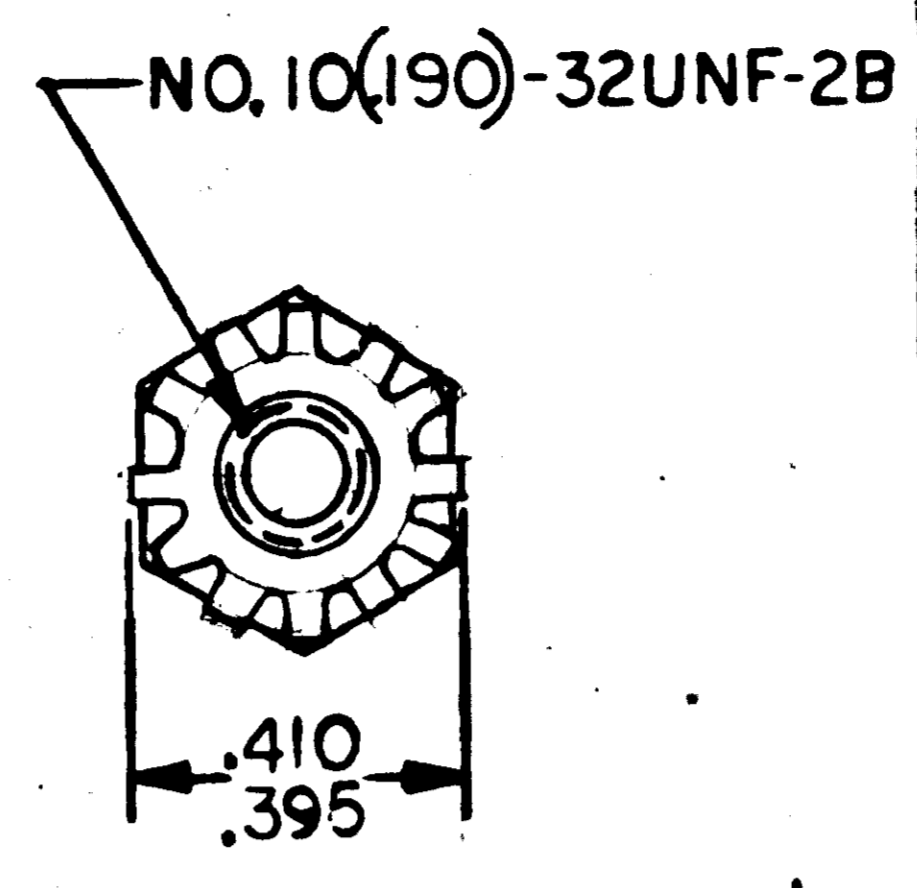
- A. ELECTRICAL RATINGS AT 25°C.
 - (1) MAXIMUM RMS VOLTAGE (V_{AC}): 140 VOLTS (INTO RESISTIVE LOAD).
 - (2) MAXIMUM AVERAGE FORWARD CURRENT: 14 AMPERES.
 - (3) MAXIMUM FORWARD SURGE CURRENT: 150 AMPS, 1/2 CYCLE, 60. CPS, OPERATING AT CASE TEMPERATURE (T_C) 100°C.
- B. TEMPERATURE RATINGS:
 - (1) OPERATING CASE TEMPERATURE (T_C) WITHOUT DERATING: -65°C TO +100°C.
 - (2) STORAGE TEMPERATURE: -65°C TO +175°C.
 - (3) THERMAL RESISTANCE: JUNCTION TO CASE 2°C/MATT
- C. CONSTRUCTION:
 - (1) SEMICONDUCTOR MATERIAL: SILICON.
 - (2) CASE MATERIAL: NICKEL PLATED STEEL.
 - (3) STUD MATERIAL: NICKEL PLATED COPPER ALLOY.
 - (4) STUD TORQUE: SHALL BE CAPABLE OF 30 INCH-POUNDS MAXIMUM.

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

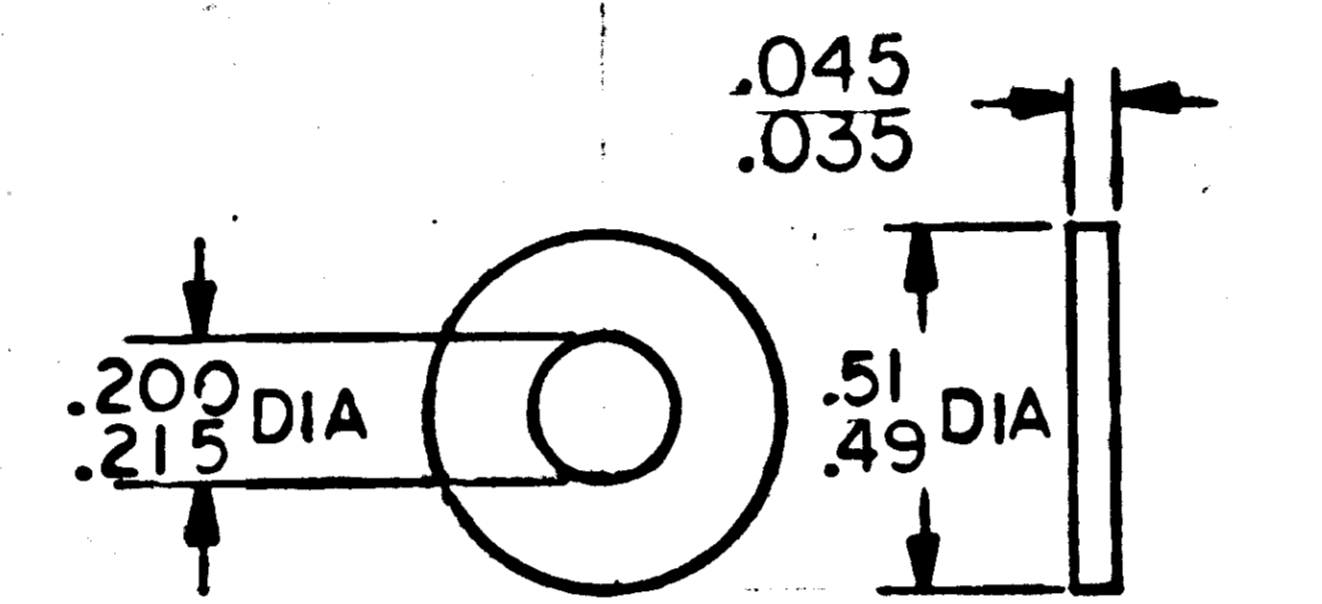
INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



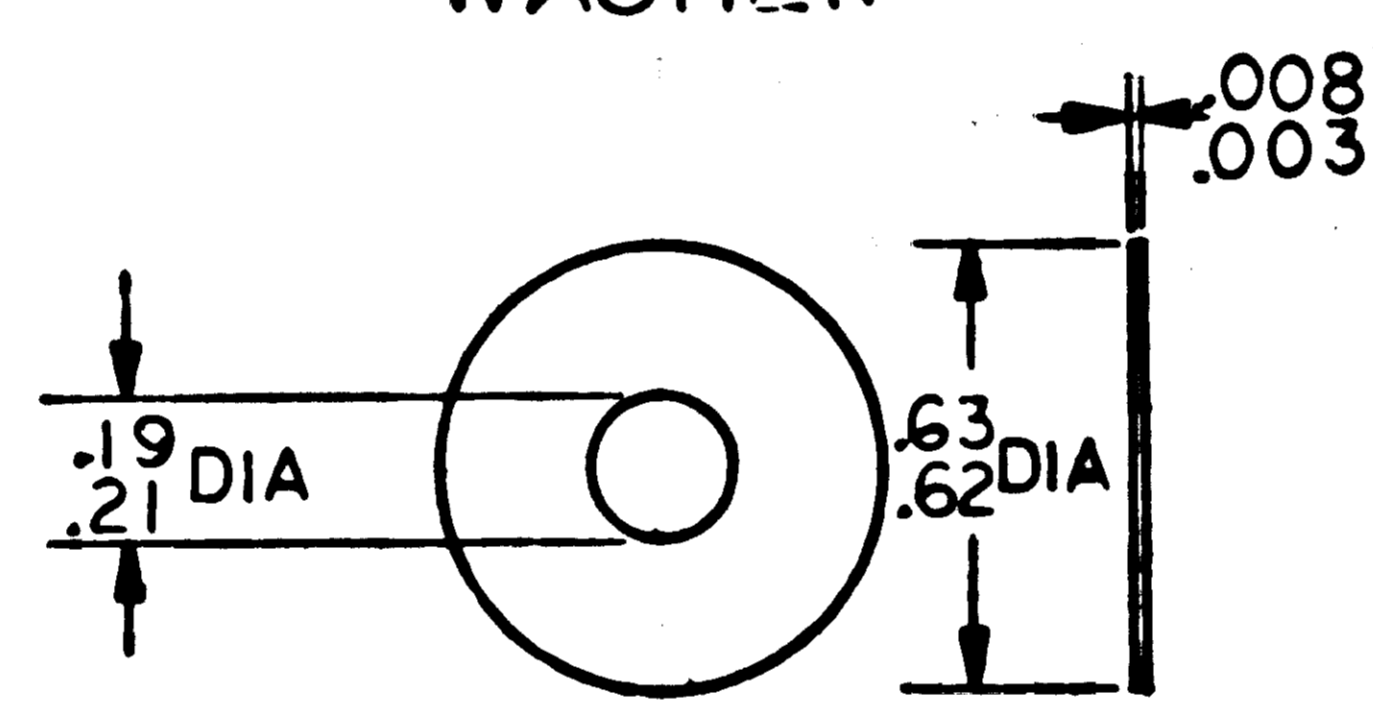
MATL: BERYLLIUM COPPER, SILVER PLATED SOLDER-LUG



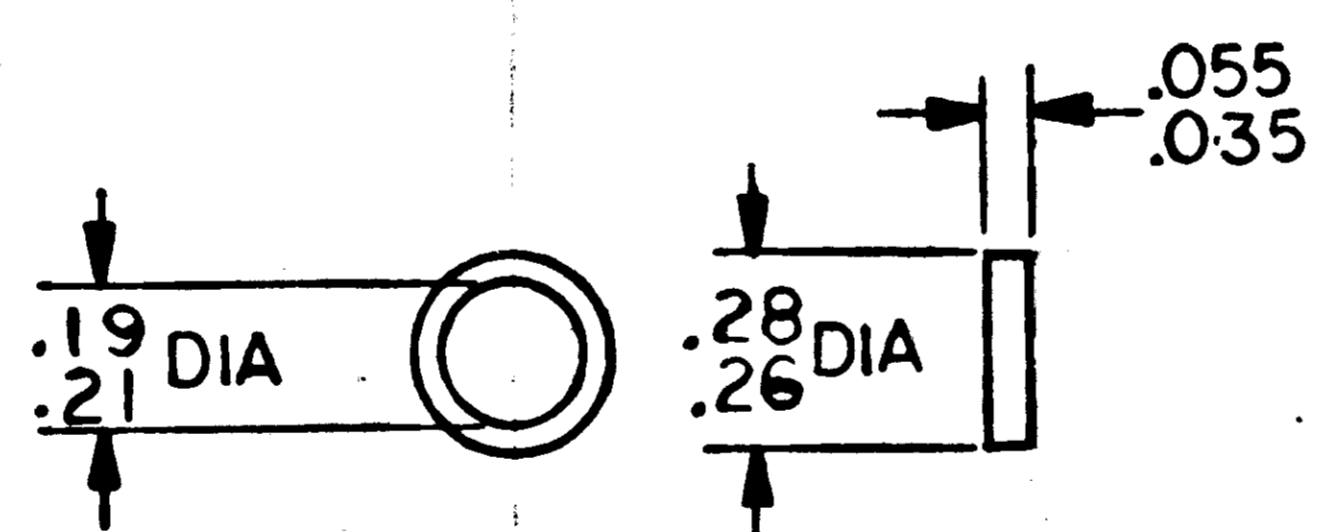
MATL: BRASS, NICKEL PLATED LOCK NUT



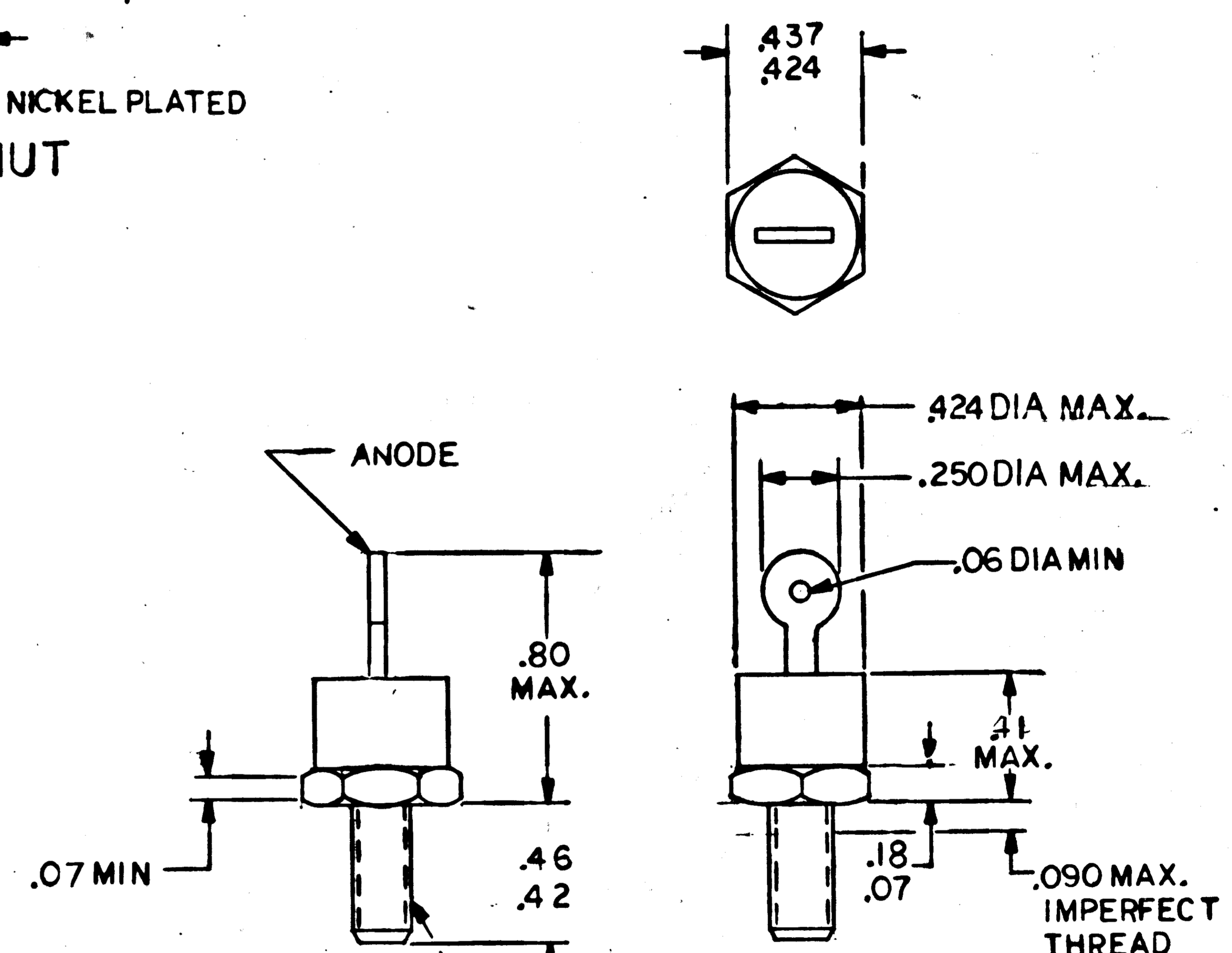
MATL: BRASS, NICKEL PLATED WASHER



MATL: MICA INSULATING WASHER 2 REQ'D



MATL: TEFLON INSULATING SPACER



NO. 10(190)-32UNF-2A (AFTER PLATING)

PACKAGE REF D0-4

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
TOLERANCES ON		
DECIMALS	DECIMALS	ANGLES
.xx	.xxx	±
±	*	
DO NOT SCALE DRAWING		
MATERIAL		
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	
CONTRACT NO.			
DRAWN BY <i>[Signature]</i> DATE 11 FEB 65			
CHECKED <i>[Signature]</i> 11 FEB 65			
APPROVAL		SEMICONDUCTOR DEVICE, RECTIFIER, POWER-FAST SWITCHING SPECIFICATION CONTROL DRAWING	
APPROVAL <i>[Signature]</i> 12 MAR 65			
NASA APPROVAL <i>[Signature]</i> 3/14/65		CODE IDENT NO.	SIZE
MIT APPROVAL <i>[Signature]</i> 10/16/65			C
MIT APPROVAL		SCALE NONE	WT
		NASA DRAWING NO. 1006329	
		SHEET 1 OF 2	

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