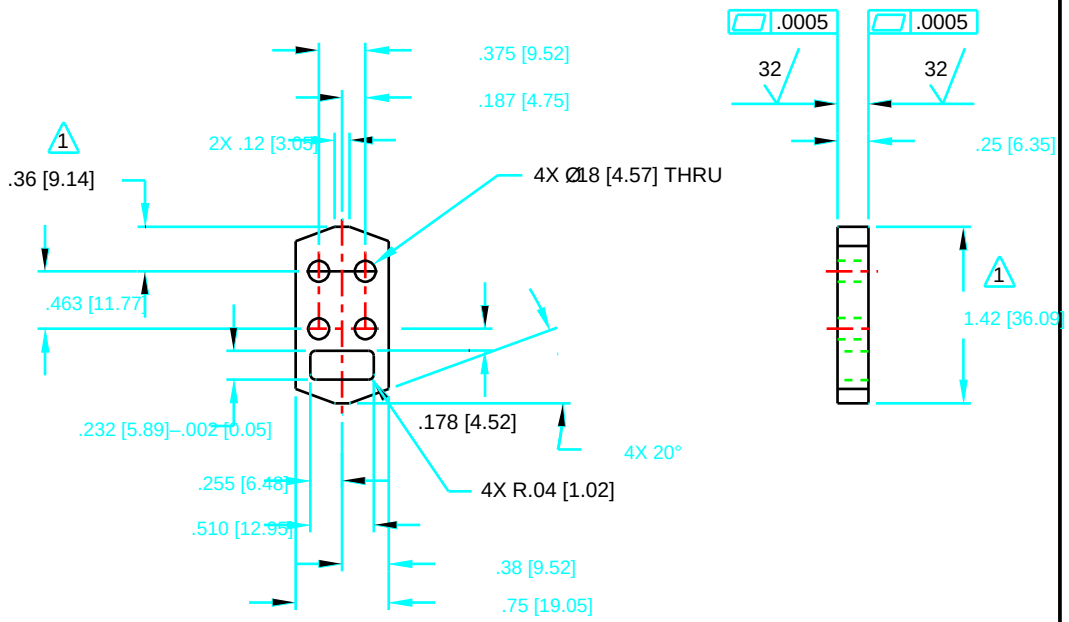
NOTES:

1. TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER OF NICKEL AND IRON PER MIL-T-21014D CLASS 3, UHV GRADE
2. THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
3. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
   A) CIMCOOL 5 STAR 49
   B) TRIM SOL
4. ALL SURFACES MUST BE MACHINED FOR CLEAN UP
5. FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
6. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1 X 10 -9 TORR CAN BE ACHIEVED
7. HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
8. DIMENSIONS IN [ ] ARE MILLIMETERS AND FOR REF. ONLY



ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY

PARTS LIST

REF. SOURCE

MITEK METALS, INC.
1340 NORTH SENATE AVE.
INDIANOPOLIS, IN 46202
TEL: 1-317-637-3574
FAX: 1-317-633-7224

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
1	.36 [9.14] WAS .28 [7.06]			
	1.42 [36.09] WAS 1.26 [32.03]	M.J.M	2/26/99	

REVISIONS

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES

DECIMALS		ANGULAR
.X –	.1 [2.5]	– 0°30'
.XX –	.01 [0.25]	
.XXX –	.005 [0.13]	

SURFACE ROUGHNESS 125

REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.

SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5

DO NOT SCALE DRAWING

LOG NUMBER P2310001-01

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY

DRAWN BY MUSCIA	DATE 11/30/98	CHIEF DESIGN ENGINEER D. SHU	DATE 12/12/98
CHECKED BY SHU/CHANG	DATE 12/11/98	GP LEADER T.M. KUZAY	DATE 12/15/98
DESIGNER SHU/MUSCIA	DATE 11/30/98	PROJECT MGR.	DATE
RESPONSIBLE ENGINEER D. SHU	DATE 12/12/98	APPROVED/RELEASED	DATE

TITLE
ADVANCED PHOTON SOURCE
P2-30 IAPS UINDULATOR
FRONT END
PHOTON SHUTTER
RADIATION GUARD

MATERIAL SEE NOTE #1

SCALE 1:1 SHEET OF

SIZE B

DRAWING NUMBER P2-310001-01