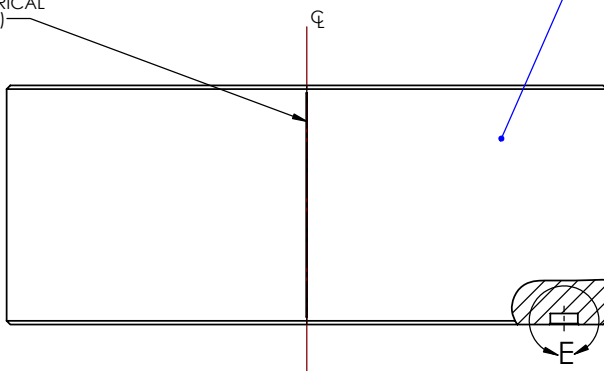


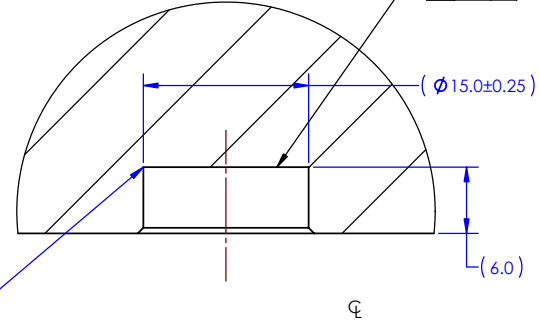
REV	DATE	DCN #	DRAWING TREE #
00	11/05		LIMITED RELEASE FOR INITIAL FEEDBACK (C.CANTLEY)
01	11/05		CHANGES FOLLOWING FEEDBACK FROM JHR & IW.
02	05/06		ADDITION OF FURTHER REFERENCE DIMPLES ON FLATS, & POLISHING NOTES ADDED. (C.CANTLEY)
03	06/06		REFERENCE DIMPLES (TO LOCATE BONDING TEMPLATE) REMOVED (DETAIL E). (R.JONES)
04	06/06		RECESSES ADDED FOR LOCATING EG STOPS ON A 300PCD (R.JONES)
05	07/06		PCD & DEPTH OF RECESSES FOR LOCATING EG STOPS REDUCED (R.JONES)
06	08/06		RELAXED SPEC. OF REF. MARKS ON BARREL, AMENDED NOTES AGREED AT MEETING, 23/08/06 (R.JONES)

ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (GROOVE WIDTH 0.25mm MIN, 0.5mm MAX.) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-)

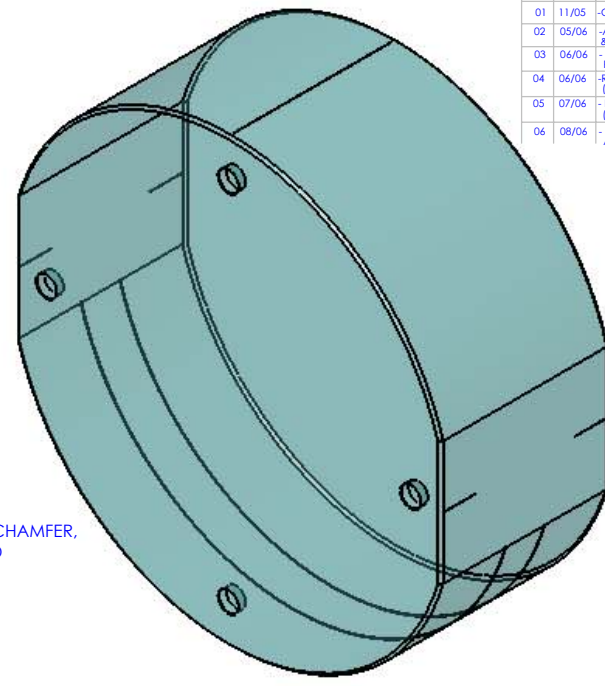


INSPECTION POLISH (SEE NOTE 2)

DETAIL E SCALE 3 : 1

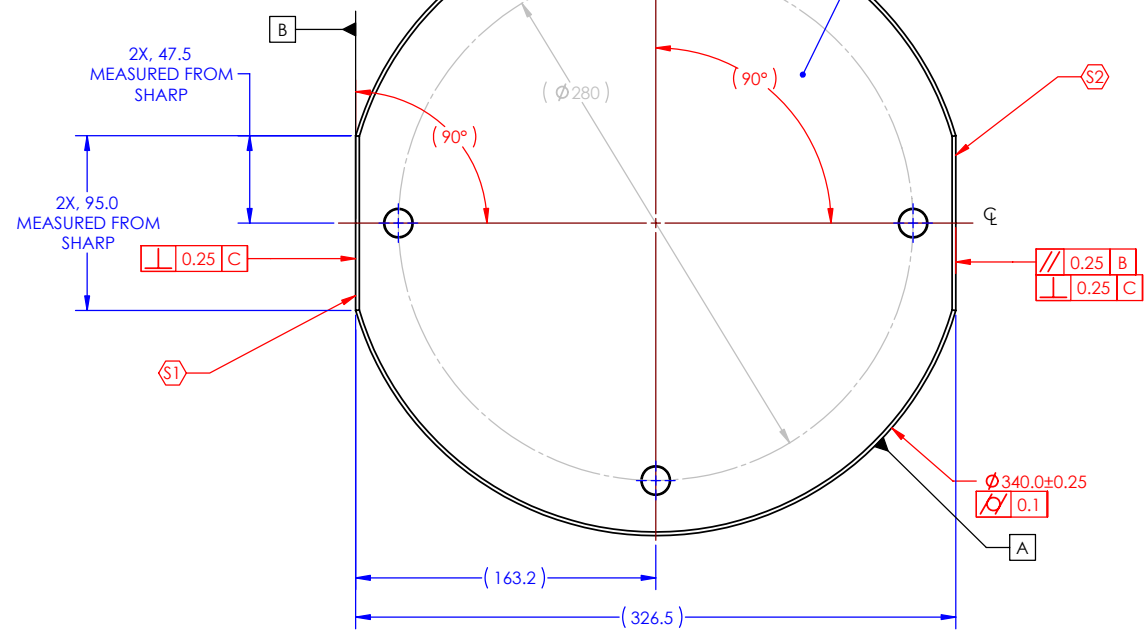


RADIUS AROUND BOTTOM OF RECESS R1 MAX. GROUND FINISH ACCEPTABLE FOR BASE AND SIDES OF RECESS.



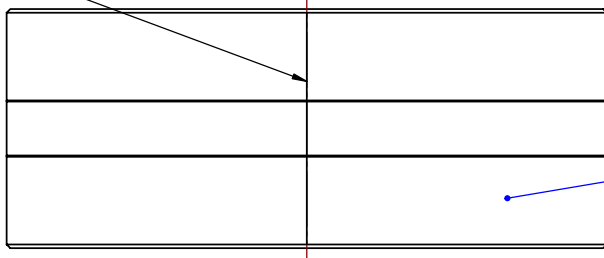
4X, $\phi 15.0 \pm 0.25 \nabla 6.0$
 $\checkmark \phi 16.0 \text{ MAX} \times 90^\circ$
 EQUALLY SPACED ON A 280 ± 2 PCD. EDGE CHIPPING TO BE MINIMISED.

COMMERCIAL POLISH SURFACE 'S3' SURFACE QUALITY TO BE 80/50 SCRATCH/DIG

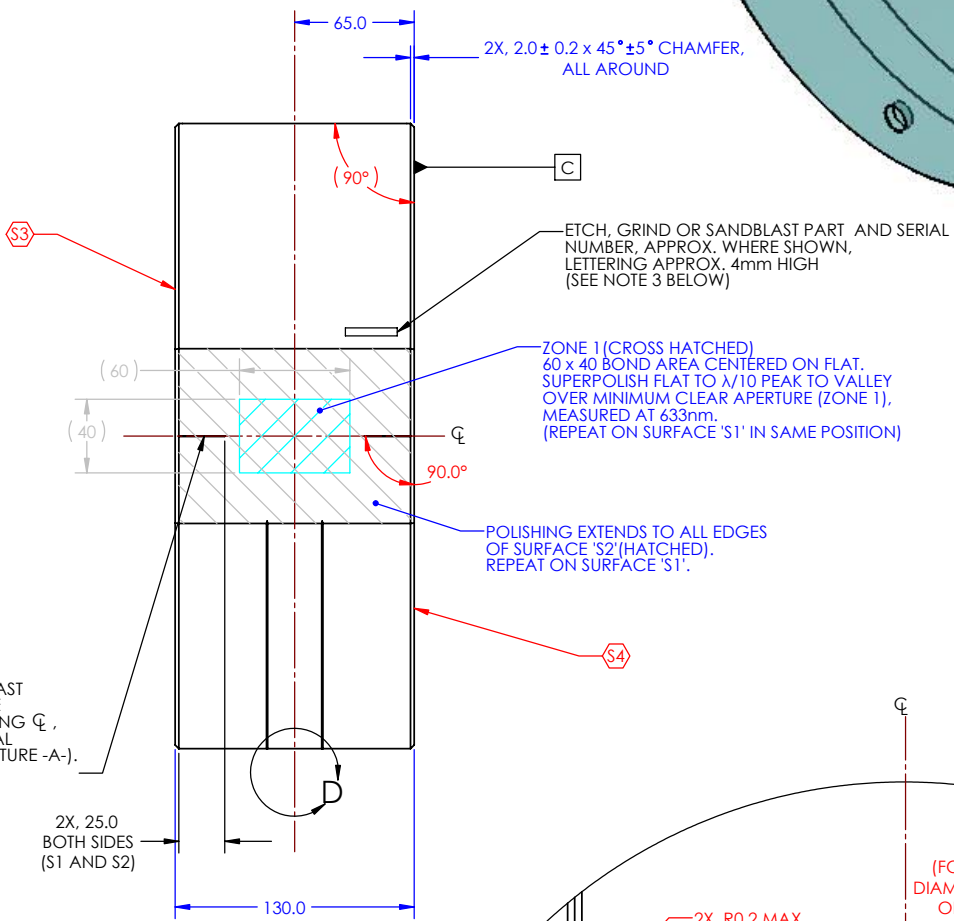


2X, ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (WIDTH 0.25mm \pm 0.1mm) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-). REPEAT ON SURFACE 'S1'

ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (GROOVE WIDTH 0.25mm MIN, 0.5mm MAX.) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-)



INSPECTION POLISH (SEE NOTE 2)



2X, $2.0 \pm 0.2 \times 45^\circ \pm 5^\circ$ CHAMFER, ALL AROUND

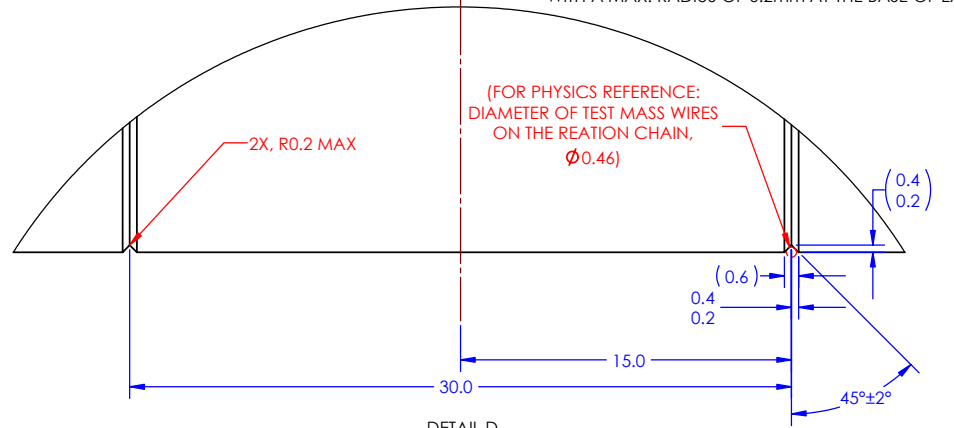
ETCH, GRIND OR SANDBLAST PART AND SERIAL NUMBER, APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH (SEE NOTE 3 BELOW)

ZONE 1 (CROSS HATCHED) 60 x 40 BOND AREA CENTERED ON FLAT. SUPERPOLISH FLAT TO $\lambda/10$ PEAK TO VALLEY OVER MINIMUM CLEAR APERTURE (ZONE 1), MEASURED AT 633nm. (REPEAT ON SURFACE 'S1' IN SAME POSITION)

POLISHING EXTENDS TO ALL EDGES OF SURFACE 'S2' (HATCHED). REPEAT ON SURFACE 'S1'.

THE GROOVES SHOWN IN DETAIL 'D' ARE REQUIRED TO LOCATE TWO STEEL WIRE LOOPS, $\phi 0.46$ mm. THE SEPARATION OF THE GROOVES FROM THE ϕ , AND EACH OTHER IS CRITICAL. GROOVES SHOULD BE APPROXIMATELY "V-SHAPED" WITH A MAX. RADIUS OF 0.2mm AT THE BASE OF EACH GROOVE.

(FOR PHYSICS REFERENCE: DIAMETER OF TEST MASS WIRES ON THE REACTION CHAIN, $\phi 0.46$)



DETAIL D SCALE 6 : 1

MANUFACTURING NOTES (UNLESS OTHERWISE SPECIFIED)		PARTS LIST	
1. DO NOT SCALE FROM DRAWING.	DIMENSIONS ARE IN MILLIMETERS	SYSTEM	ADVANCED LIGO
2. INSPECTION POLISH ALL FACES, EDGES AND CHAMFERS. THIS INCLUDES BOTH CURVED SIDES OF THE MASS. ALL SURFACES SHALL APPEAR TRANSPARENT.	TOLERANCES: ± 0.1	SUB-SYSTEM	SUS
3. SURFACE QUALITY ON SURFACE 'S3' TO BE 80/50 SCRATCH/DIG (AS PER MIL-PRF-13830B) ANGULARITY 0.1	ANGULARITY 0.1	MATERIAL	F2
4. ETCH, GRIND OR SANDBLAST PART AND SERIAL NUMBER, APPROX. WHERE SHOWN, USE LETTERING APPROX. 4mm HIGH SERIAL NUMBERS START AT '001' FOR THE FIRST PART, AND PROCEED CONSECUTIVELY (EXAMPLE: 000040001)	SEE NOTES	NEXT ASSY	N-PTYPE QUAD ETM
5. MATERIAL TO BE SUPPLIED WITH CERTIFICATE OF CONFORMITY	FINISH	PART NAME	REACTION TEST MASS
6. $\lambda = 633$ nm FOR SURFACE MEASUREMENTS		DRAWN	D
		CHECKED	C-CANTLEY
		APPROVED	
		SCALE	1:2
		PROJECTION	
		DWG. NO.	D050420
		REV	06
		SHEET	1 OF 1