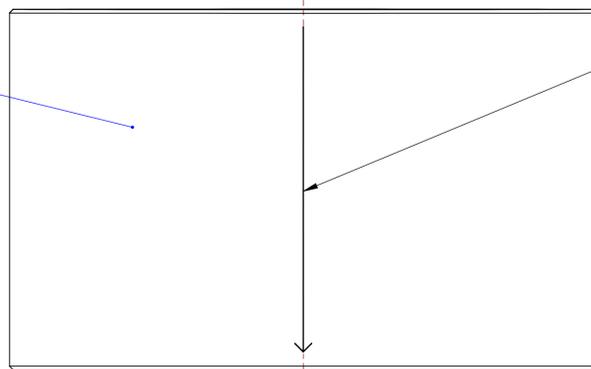
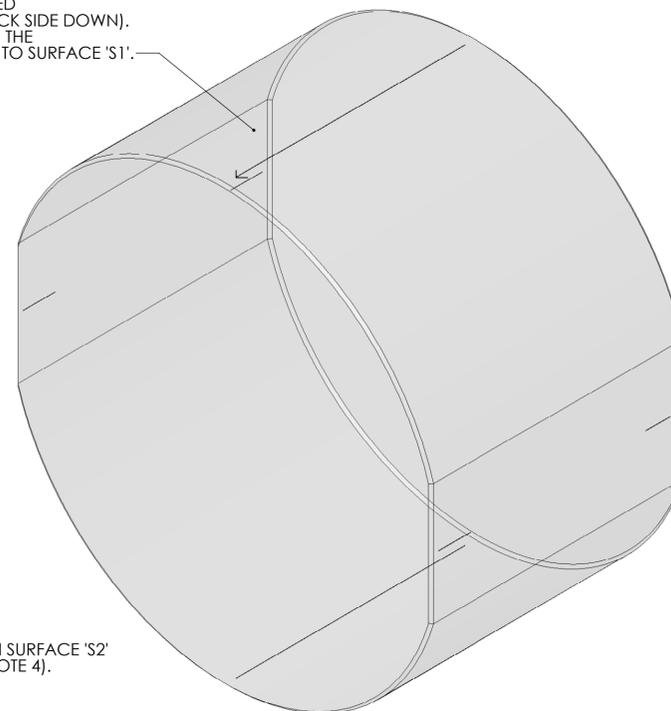


REV.	DATE	DCN #	DRAWING TREE #
v1	11th Nov 2008	LIGO-E080530-v1	
v2	Feb-20-09	LIGO-E0900046-v1	
v3	Mar-26-2009	LIGO-E0900095-v1	
v4	28 MAY 2010	E1000188	

BARREL (SIDE) AND BEVEL POLISH (SEE NOTE 3)

ETCH OR GRIND LEGIBLE REFERENCE GROOVE (0.25mm ± 0.05mm WIDE) ALONG ϕ WITHIN ±1° CLOCKING ANGLE (WITH RESPECT TO DATUM FEATURE -A-), PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-), WITH ARROW POINTING TO SURFACE 'S1' WITHIN ±0.1mm

SUBSTRATE IS SHOWN IN SUSPENDED STATE WITH VERTICAL WEDGE (THICK SIDE DOWN). THE ARROWED LINE IS SHOWN ON THE THIN SIDE, AND AS STATED POINTS TO SURFACE 'S1'.



TOP VIEW

0.6 C (REFER TO NOTE 8.)

2X, 29.0±0.5 ON BOTH FLATS

2X, 6.0

Ø 340.00±0.25
0.1
0.25 C

S6 POLISH SURFACE 'S6' (SEE NOTE 3).

S1 POLISH SURFACE 'S1' (SEE NOTE 4).

S2 POLISH SURFACE 'S2' (SEE NOTE 4).

ETCH OR GRIND SERIAL NUMBER, APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH (SEE NOTE 7 FOR FURTHER DETAILS)

POLISH CROSS HATCHED AREA SEE NOTE 6 (REPEAT ON SURFACE 'S3').

POLISH SURFACE 'S4' SEE NOTE 5 (REPEAT ON SURFACE 'S3').

4X, R5 TYP

2X, ± 0.2 x 45° ± 5° CHAMFER, ALL AROUND

(2X, 95 TYP)

90.0°

0.25 C

0.25 B
0.25 C

S5 POLISH SURFACE 'S5' (SEE NOTE 3).

326.5±0.2
0.2 A

10.0

32.5

65.0

(2.0)

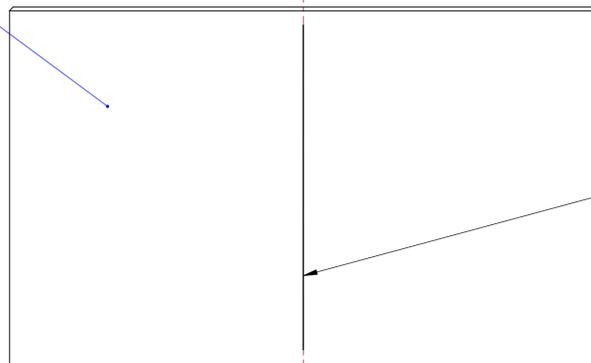
200.0±0.5

0.7°+0.03°
-0.00°
WEDGE ANGLE

BARREL (SIDE) AND BEVEL POLISH (SEE NOTE 3)

2X, ETCH OR GRIND LEGIBLE REFERENCE GROOVE (WIDTH 0.25mm ± 0.05mm) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-), REPEAT ON SURFACE 'S4' WITHIN ±0.1mm

ETCH OR GRIND LEGIBLE REFERENCE GROOVE (0.25mm ± 0.05mm WIDE) ALONG ϕ WITHIN ±1° CLOCKING ANGLE (WITH RESPECT TO DATUM FEATURE -A-), PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-), WITHIN ±0.1mm



BOTTOM VIEW

MANUFACTURE NOTES:

- DO NOT SCALE FROM DRAWING.
- INTERPRET DRAWING AS PER ANSI Y14.5M 1994.
- BARREL (SIDE) AND BEVEL POLISH PER E080511-v3.
- FINISH SURFACES 'S1' AND 'S2' AS PER E080511-v3.
- FINISH (FLAT) SURFACES 'S3' AND 'S4' AS PER E080511-v3.
- FINISH CROSS HATCHED AREA ON 'S3' & 'S4' AS PER E080511-v3.
- REFER TO E080511-v3 FOR MORE INFORMATION ON SERIAL NUMBER.
- INTENDED TO CAPTURE ALLOWABLE WEDGE ANGLE CLOCKING TOLERANCE OF ±5°.
- APPLY COATING PER E0900041.

PARTS LIST

DIMENSIONS ARE IN MILLIMETERS		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
TOLERANCES:	X ± 0.1	SYSTEM	ADVANCED LIGO
XX ± 0.05		SUB-SYSTEM	COC
ANGULAR ± 0.1°		NEXT ASSY	ITM
MATERIAL:	REF E080031-v1	PART NAME	ITM SUBSTRATE

NAME	DATE	SIZE	DWG. NO.	REV.	
DRAWN	C. TORRE	14 Nov 08	D	D080657	v4
CHECKED	D. COFFE	19 Nov 08			
APPROVED	D. COFFE	4 Dec 08	SCALE: 1:2	PROJECTION:	SHEET 1 OF 1