GRISM SPECIFICATION SHEET

TITLE, DATE J600 GRISM ver.20080804

ORGANIZATION

Astronomical Institute, Tohoku University
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GENERAL

Intended Use:	Astronomical Spectrograph
Wavelength Range:	0.8 - 1.3 um
Transmission Peak Wavelength	1.2 um
Operating Temperature:	~100 K

PRISM SPECIFICATION

Material:	IR grade Fused Silica
Dimension:	67 ±0.1 mm x 67 ±0.1 mm
Thickness:	52.0 ±0.1 mm
Apex Angle:	37.5 ±0.2 ° (Right angle prism)
Bevel Size:	1.0 mm (Required on all edges)
Surface Quality:	40/20 (S/D)
Surface Accuracy	< λ /2P-V(power), < λ /5P-V(irregularity) w/633nm at incidence plane grating plane
Cosmetic Statement:	No bubbles and striae
AR Coating	<1%, 0.8-1.5um, Coated only on incidence plane

GRATING SPECIFICATION

Material:	Regular Resin
Grating Area Dimension:	61 mm x 61 mm
Groove Frequency:	210 grooves/mm
Braze Angle:	26.7 °
Catalog Number:	53-*-866R (from Newport catalog ver. 06/08)

OVERALL PERFORMANCE

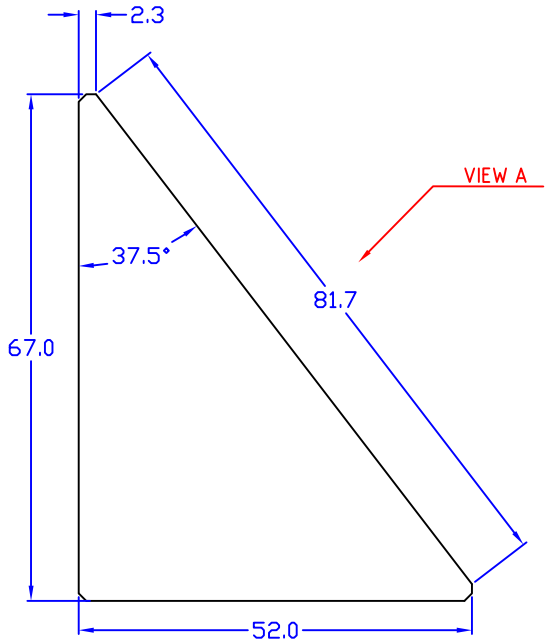
Efficiency:	>70% on the operationg wavelength

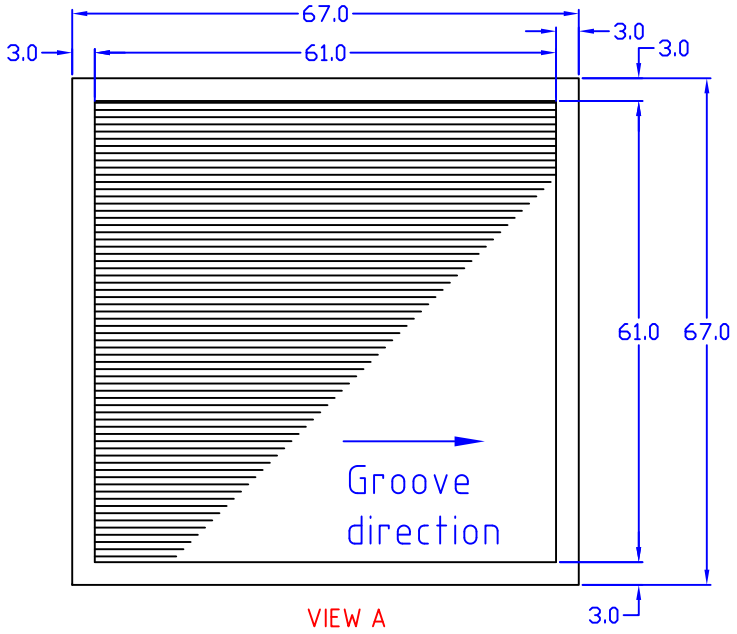
OTHERS

Required literature upon delivery:

1, Measured surface accuracy or error of transmission wavefront
2, Measured dimensions at 20℃ (0.1mm and 0.1° accuracy)
3, Measured efficiency

Please see attached drawing.





MATERIAL: IR Fused Silica, Regular resin
PRISM ANGLE: 34,5 +/- 0.2 degree
BLAZE ANGLE: 26.7 degree
GROOVE ANGLE: 90 degree
GROOVE NUMBER: 210 grooves/mm
CATALOG NO.: 53-x-866R
BEVEL: 1mm on all edges

	TITLE: MOIRCS GRISM J600	ORGANIZATION: ASTRONOMICAL INSTITUTE, TOHOKU UNIVERSITY
TOLERANCE UNLESS OTHERWISE NOTED .X +/- .1 .XX +/- .01 ∠ +/- .5	MATERIAL: IR Fused Silica, Regular Resin	DESIGN: CHIHIRO TOKOKU
	DIMENSIONS: mm	REVISED DATE: 8/4/2008
	QUANTITY: 2	DRAWING SIZE: A4