

600 Grooves, 12.5 x 25mm, 400nm Ruled Diffraction Grating
#41-021



Reflective Ruled Diffraction Gratings

Reflective Ruled Diffraction Gratings are optical components that separate (diffract) white (polychromatic) light into its component wavelengths. Theoretical resolving power is directly proportional to the number of grooves per millimeter ruled into the master grating. The blaze angle and groove spacing determine the specific wavelength and spectral region where the grating has its maximum efficiency. Reflective Ruled Diffraction Gratings are high quality, instrument-grade gratings that are ideal when high efficiency is the primary concern in devices such as monochromators and spectrometers. Each grating is fabricated from a highly accurate master grating that is copied many times. The duplication process is described below for replicated gratings.

General

Type: Reflective Diffraction Grating

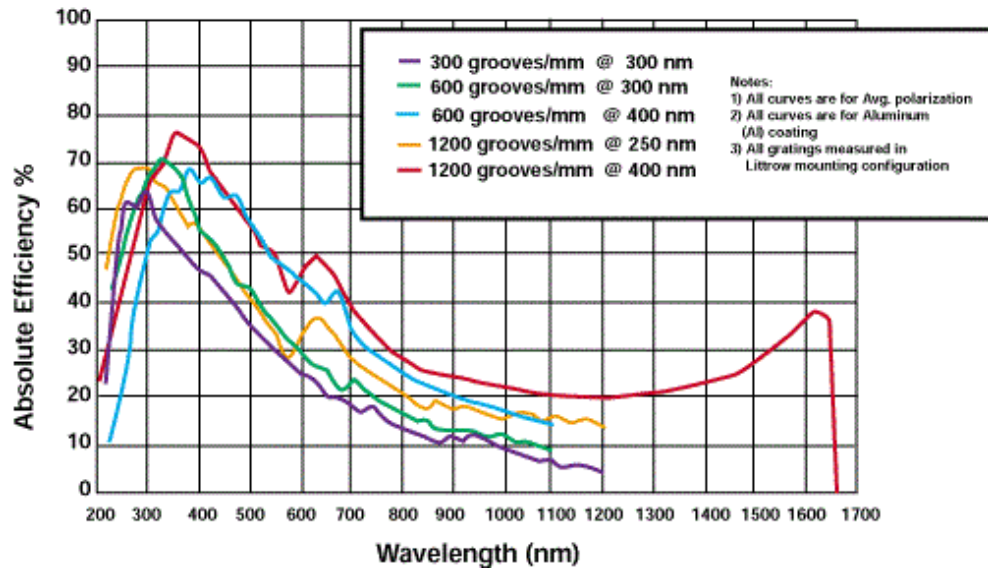
Physical & Mechanical Properties

Dimensions (mm):	12.5 x 25.0 $\pm$ 0.5
Clear Aperture (%):	90
Construction:	Ruled Grating
Direction of Grooves:	Parallel to Short Dimension
Length (mm):	25.00
Thickness (mm):	9.50 $\pm$ 0.5
Width (mm):	12.50
Alignment of Grooves to Edge (°):	$\pm$ 0.5

Optical Properties

Groove Density (grooves/mm):	600
Blaze Wavelength (nm):	400
Blaze Angle (°):	6.88
Coating:	Bare Aluminum
Substrate:	Float Glass
Absolute Peak Efficiency, Typical (%):	72
Peak Efficiency Avg, Typical (%):	>70

Typical Efficiency Curves for Ruled Gratings
Optimized (Blaze) Wavelengths from 250-400 nm



June 23, 2026

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

Stock No.	Description
41-021	600 Grooves, 12.5 x 25mm, 400nm Ruled Diffraction Grating

This item is EU RoHS (2015/863/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.

[Signature]

#41-021
Subject to technical modifications (23-06-2026)

June 23, 2026

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



June 23, 2026

<i>Stock No.</i>	<i>Description</i>
41-021	600 Grooves, 12.5 x 25mm, 400nm Ruled Diffraction Grating

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations



June 23, 2026

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

Stock No.	Description
41-021	600 Grooves, 12.5 x 25mm, 400nm Ruled Diffraction Grating

This item does not contain any of the substances listed on the Reach SVHC list as of 21 January 2025 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts “non-hazardous” glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance
June 23, 2026

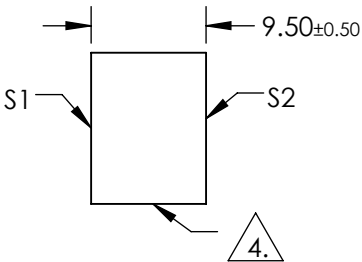
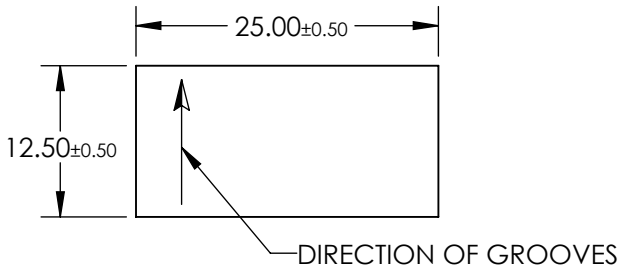
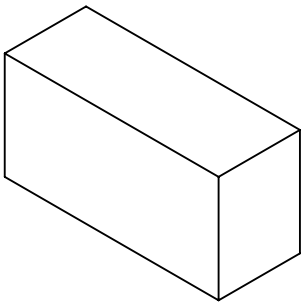
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NOTES:

- 1. SUBSTRATE MATERIAL:
FLOAT GLASS
- 2. COATING (APFLOW ACROSS CLEAR APERTURE):
S1: BARE ALUMINUM
S2: NONE
- 3. BLAZE ANGLE: 6° 53'
NOMINAL BLAZE WAVELENGTH: 400nm
EFFICIENCY: 60-80% @ BLAZE WAVELENGTH

4. EDGES GROUND

- 5. RoHS COMPLIANT



**FOR INFORMATION ONLY:
DO NOT MANUFACTURE
PARTS TO THIS DRAWING**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
DIMENSIONS ARE FOR REFERENCE ONLY

EO® Edmund Optics®

SHAPE	S1	S2	THIRD ANGLE PROJECTION		TITLE		GRATING DIFF 600GR 400nm 12.5 x 25	
	PLANO	PLANO	ALL DIMS IN	mm	DWG NO	41021	SHEET	1 OF 1
CLEAR APERTURE	11.25 x 22.5	11.25 x 22.5						