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ABSTRACT

The purpose of the present invention is to provide, in order to enable defect inspection after the formation of a conductive film, a conductive film having low transmittance in a wavelength range including Ar laser inspection light (a wavelength of 488 nm) and having high transmittance in a wavelength range including Nd:YAG laser (a wavelength of 1064 nm) and He:Ne laser (a wavelength of 632 nm) that are used to improve substrate deformation caused by internal stress of a multilayer reflection film and an absorption film. Provided is a reflective mask blank for EUV lithography having a conductive film (12) on the back surface side of a substrate (11), the reflective mask blank being configured such that the refractive index and extinction coefficient at wavelengths of 1000-1100 nm of the conductive film (12), the refractive index and extinction coefficient at wavelengths of 600-700 nm of the conductive film (12), the refractive index and extinction coefficient at wavelengths of 400-500 nm of the conductive film (12), and the film thickness t of the conductive film (12) each fall within a specific range.

Figure 1