

ABSTRACT

There are provided a phase shift mask having a small number of haze defects, that is, a phase shift mask
5 capable of sufficiently suppressing occurrence of haze, and a method for manufacturing the phase shift mask. A phase shift mask (100) according to the present embodiment is a phase shift mask having a circuit pattern by application of exposure light having a wavelength of
10 200 nm or less, the phase shift mask including a substrate (11), a phase shift film (12) that is formed on the substrate (11) and has a circuit pattern, and a protective film (13) that is formed on an upper surface (12t) and a side surface (12s) of the phase shift film
15 (12), in which the phase shift film (12) enables adjustment of each of phase and transmittance with respect to the exposure light to be transmitted to a predetermined extent, the protective film (13) has a refractive index n in a range of 1.2 or more and 2.6 or
20 less with respect to the exposure light and an attenuation coefficient k in a range of 0.0 or more and 0.4 or less, and in a case where a film thickness of the phase shift film (12) is denoted by d_1 and a film thickness of the protective film (13) is denoted by d_2 ,
25 d_2 is thinner than d_1 , and d_2 is 15 nm or less.

FIG. 2A and FIG. 2B