

What is claimed is:

1. A processing apparatus for an electronic component, the processing apparatus comprising:

a first illumination portion configured to irradiate a second inner surface on an opposite side of a second outer surface and a third inner surface on an opposite side of a third outer surface via a first outer surface with a first irradiation light capable of passing through at least a part of the electronic component in a state where the electronic component having the first outer surface, the second outer surface on a reverse side of the first outer surface, and the third outer surface connected to the first outer surface and the second outer surface is disposed on a first inspection position;

and a first imaging portion configured to capture an image of a first internal corner portion formed by the second inner surface and the third inner surface based on the first irradiation light emitted from the first outer surface after being specularly reflected on the second inner surface and the third inner surface.

2. The processing apparatus for an electronic component according to claim 1, wherein the first internal corner portion includes an inspection target region extending along an intersection line between the second inner surface and the third inner surface, and

wherein the first imaging portion has a field of view capable of capturing an image of an entire region of the inspection target region in a state of being positioned on a fixed position.

3. The processing apparatus for an electronic component according to claim 1 or 2, further comprising:

a holding portion configured to hold the electronic component,

wherein a transmittance of the first irradiation light to an inside of the electronic component in a case where the first outer surface is irradiated with the first irradiation light is higher than a transmittance of the first irradiation light to the inside of the electronic component in a case where the second outer surface is irradiated with the first irradiation light, and

wherein the holding portion is configured to hold the electronic component on the first inspection position such that the first outer surface faces the first illumination portion and the first imaging portion.

4. The processing apparatus for an electronic component according to claim 3, further comprising:

a conveyance portion configured to convey the electronic component by moving the holding portion between the first inspection position and a second inspection position which is different from the first inspection position;

a second illumination portion configured to irradiate the second inner surface and a fourth inner surface on an opposite side of a fourth outer surface with a second irradiation light capable of passing through at least a part of the electronic component via the first outer surface in a state where the electronic component further including the fourth outer surface connected to the first outer surface and the second outer surface is disposed on a second inspection position; and

a second imaging portion configured to capture an image of a second internal corner portion formed by the second inner surface and the fourth inner surface, based on the second irradiation light emitted from the first outer surface after being specularly reflected on the second inner surface and the fourth inner surface.

5. The processing apparatus for an electronic component according to claim 4, further comprising:

a light shielding member which covers the first inspection position, the second inspection position, an optical path of the first irradiation light from the first illumination portion to the first imaging portion, and an optical path of the second irradiation light from the second illumination portion to the second imaging portion.

6. The processing apparatus for an electronic component according to claim 4 or 5, further comprising:

a conveyance control portion configured to convey the electronic component between the first inspection position and the second inspection position by the

conveyance portion;

a first imaging control portion configured to cause the first illumination portion to irradiate the second inner surface and the third inner surface with the first irradiation light, and causes the first imaging portion to capture an image of the first internal corner portion, in a state where the conveyance control portion causes the holding portion to stop on the first inspection position; and

a second imaging control portion configured to cause the second illumination portion to irradiate the second inner surface and the fourth inner surface with the second irradiation light, and causes the second imaging portion to capture an image of the second internal corner portion, in a state where the conveyance control portion causes the holding portion to stop on the second inspection position.