LIGHT DIFFUSER DEVICE USED IN PASSIVE COMPONENT INSPECTION IN TAPING MACHINE OR THE LIKE

ABSTRACT OF THE DISCLOSURE

A light diffuser device for use in passive component inspection in taping device is disclosed. The light diffuser device comprises

(a) a light diffuser (30) with a cylindrical body (33) having a substantially tapered front end (32), wherein the cylindrical body (33) is provided with a plurality of elongated holes (34) to hold a plurality of LED bulbs, and a through hole (36) is provided at the center of the diffuser (30), and wherein the elongated holes (34) are arranged concentrically on the cylindrical body (33) of the LED diffuser device (100);

(b) a LED soldering plate (20) having a top surface (21) and a bottom surface (22), wherein the bottom surface (22) is provided with a plurality of LED bulbs (24), and the bulbs (24) sit into the elongated holes (34) of the light diffuser (30), and the center of the soldering plate (20) is a through aperture (26); and

(c) a LED light housing (10) to enclose the LED soldering plate (20) and the light diffuser (30), wherein the LED light housing has an internal surface (14) and an external surface (12) and the internal surface (14) is chromed to provide a shining surface which can provide a reflection effect upon light shines thereon, and the through hole (36) and the through aperture (26) are in alignment, which allows light to be focused onto the diffuser (30) and pass through the holes (26, 36) for use in inspection a passive components formed on a tape.

(FIG. 1)